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ABSTRACT

Three hundred and six 8mm cartridge-type films were produced to provide deaf children instruction in and practice with noun vocabulary, question forms, prepositions, and speechreading. Films were placed in 12 classes. Method of presentation and time spent was determined by individual teachers, most of whom had attended a three-day orientation workshop. Group I, consisting of 38 children (median age 8.6) worked with the projectors and language films similar to but not a part of the experimental films for one year. Group II (43 children, median age 7.6) used the experimental films for one year. Group III (29 children, median age 6.6) used both groups of films during two years. To determine progress in speechreading ability, the Illinois Communication Scale (Form B) was administered to each class before and after each year. Group III showed a 50% improvement in speech reading ability over the two years. Group I improved 21.74% while Group II showed 12.00% improvement. Reasons suggested for this are differences in intelligence, previous education, and age, and greater similarity than had been thought between the experimental and non-experimental films. The major criticism related to content (unrelated noun vocabulary). Appendixes include the Illinois Communication Scale and the Evaluation questionnaire. (KW)

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FINAL REPORT

Grant No. OE6-19-074

AN EXPERIMENTAL PROGRAM OF LANGUAGE DEVELOPMENT USING A SYSTEMATIC APPLICATION OF AUDIO-VISUAL AIDS TO REINFORCE THE CLASSROOM TEACHER'S PROGRAM FOR CHILDREN WITH IMPAIRED HEARING

June, 1968

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Grant No. OE6-19-074

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1966 - 1967
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1967 - 1968

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Illinois School for the Deaf
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CONTENTS

Page

INTRODUCTION
- The Problem 1
- Objectives. 3

PROCEDURE
- Cooperating Schools 4
- Orientation Workshop. 6
- Organization of Equipment and Materials 7
- Utilization of Materials 7
- Testing of Students 9
- Evaluation by Teachers 11

RESULTS
- Student Performance 12
- Teacher Evaluation 17

DISCUSSION AND CONCLUSIONS 22

SUMMARY 26

REFERENCES 29

APPENDICES
- Teacher's Guide . . . . . A
- Illinois Communication Scale, Form B. . . . . B
- Evaluation Questionnaire. C

TABLES

Page

1. Composition of three groups of participating pupils 13

2. Average pre-test raw score by age 14

3. Comparison of average pre-test scores of research subjects with scores of standardization population - by age 15

4. Change in performance on Illinois Communication Scale 16

INTRODUCTION

The Problem

It has been an established concept that the deaf child who has frequent opportunities to use his speech and speech reading develops greater proficiency in these areas. Quigley and Frisina (1961) found in their study of day and residential pupils that the day pupils had significantly better speech and speech reading abilities. They attributed this to the "practice effect" or "oralness of the environment" of the day pupils. Another significant finding was that the day pupils of deaf parents, while not doing as well in speech and speech reading, did do significantly better in finger spelling and vocabulary. They attribute this result to the use of finger spelling in the home. The better vocabulary shown by this group can be attributed to the "richer language environment" or "practice effect." This study assumes that the more contact the deaf child has with language practice, regardless of the mode of his communication, the more proficient he will be in language.

At the present time residential schools for the deaf do not have the personnel to create a saturated communication environment. In fact, as the teacher shortage increases and our class sizes increase, the deaf child's communication environment decreases. At the same time the communication environment is decreasing we are faced with an ever-increasing number of multiply handicapped children.

At the 40th meeting of the Convention of American Instructors of the Deaf, Lowell (1962, p. 64) called attention to this increase and suggested the need for segregating these children from the so-called "normal" deaf child, in order to better diagnose and educate them. Furth (1962) estimates that, based on teachers' judgments as to whether pupils are achieving at expected levels for the "normal" deaf child, 44 per cent, or more, of the deaf children between the ages of eight and twelve are below average expected achievement.

Confronted with these two rather glaring facts: (1) teacher and personnel shortages, and (2) an increase in multiply handicapped children, we must look for additional methods of teaching and of expanding communication contacts for these children. We urgently need to make better use of the master teacher's talents and to expand the pupils' opportunities to communicate. One program that will better utilize the master teacher's time and increase the total communication contact of the pupil is to use audio-visual aids more effectively than in the past. The field of education of the deaf has been extremely unimaginative in the utilization of these aids. Some notable exceptions have been the advent of captioned films and some attempts at lip reading films. Both of these experiences have, however, been primarily aimed at adult or older children's consumption rather than younger children.

It is possible with 8mm movies and filmstrips with tape recorders to program language, lip reading and acoustic training,

which can complement classroom programs. If we adapt audio-visual aids to programmed learning, we can broaden the communication contact of our children.

We propose that programs can be developed which can extend communication opportunities for hearing impaired, multiply handicapped children, by adapting a highly structured language program to teaching machine programs presented through audio-visual aids. Additional contact can be given in the classroom, the dormitory and the home by developing programmed films and tape recordings. The child's response to both visual and auditory stimuli should be in speech and in writing.

Objectives

The primary objective of the first phase of this project (Grant No. OE4-19-055) was to develop 8mm films which could be used in auto-instructional projector units and which would be aimed at the development of language and speech reading proficiencies. The films were to be primarily single-concept, noun vocabulary in nature, with a sampling of films to also include question and answer forms, prepositions, number concepts and descriptive stories. A subsidiary component of this objective was the design of the films in such a way that a classroom teacher could integrate a language program provided by the films into her total curriculum and provide individualized instruction which is frequently impossible to include in the daily classroom program.

The second major objective was to evaluate the equipment, films and language program in classroom settings. While one of the desires here was to determine to what extent the utilization of these films would further the language and speech reading development of young deaf children, the chief aim was to obtain from teachers their criticisms, suggestions for modification and general comments on what they thought to be the strengths and weaknesses of the equipment and materials as presently constructed.

PROCEDURE

To fulfill the first objective, a total of 306 language films were designed and produced. These films provided instruction in vocabulary (taken from standard vocabulary lists in general use with hearing impaired children) and were 8mm cartridge type films suitable for use in auto-instructional movie projectors with self-contained TV-type screens. While originally, silent films were intended, a sound version of the entire series was also produced. A list of the vocabulary presented and a general description of means of using the films has been published as a Teacher's Guide (Appendix A).

Cooperating Schools

In the interest of comprehensiveness, it was decided that the films would be used and evaluated in as many schools and classes for

the hearing impaired as possible, representing both day and residential schools, and that a wide age range of children should be obtained. At the outset of the field testing the cooperating schools were:

1. Atwater School, Milwaukee, Wisconsin.
2. Central Institute for the Deaf, St. Louis, Missouri.
3. Champaign Oral Deaf Program, Champaign, Illinois.
4. Dallas Pilot Institute, Dallas, Texas.
5. Illinois Children's Hospital-School, Chicago, Illinois.
6. Illinois School for the Deaf, Jacksonville, Illinois.
7. Indiana School for the Deaf, Indianapolis, Indiana.
8. Iowa School for the Deaf, Council Bluffs, Iowa.
9. Kendall School for the Deaf, Washington, D. C.
10. Marquette School, Chicago, Illinois.
11. Prescott School, Lincoln, Nebraska.
12. St. Joseph Institute for the Deaf, St. Louis, Missouri.
13. Walden School, Deerfield, Illinois.

The above schools represented parochial, private and public residential schools, public day classes, a private day school and a school designed primarily for the orthopedically impaired. Classes in the various programs which were selected for utilization of the materials included those for "typical" hearing impaired children, educationally retarded deaf children, orthopedically impaired and multiply handicapped deaf youngsters. Ages of children participating ranged from five through sixteen, with one student above nineteen

years of age. Over 90% of the children were under thirteen years of age, with the range five years through eight years comprising the largest group.

Orientation Workshop

After the construction of the films and prior to field testing in selected programs, a workshop was held at the Illinois School for the Deaf (August 15-17 1966) for the purpose of orienting the teachers who would be participating in the evaluation phase of the project. During this three-day training program teachers were given an introduction to the concepts and procedures of automated teaching, heard lectures on the effective use of media with hearing impaired children, and were presented with an over-view of the background and objectives of this project. Time was provided for demonstrations of the projectors, materials and other equipment which would eventually be used by the participating teachers, and the responsibilities of the Illinois School for the Deaf Research Department and the cooperating schools were delineated. In order to assess the effectiveness of the workshop, questionnaires were sent to each of the participants after they had returned to their schools and been using the program materials for a reasonable period of time. The results of this questionnaire survey will be considered in a later section of this report.

Organization of Equipment and Materials

Projectors, file cabinets, language masters and other equipment were sent to the participating schools by the Fall of 1966. Due to uncontrollable delays in film production, the experimental films were not distributed to all of the programs until the Fall of 1967. During the period in which the experimental films were not available, a series of the original films produced by the Illinois School for the Deaf Research Department were provided, with the explanation that, while these would afford opportunity to use and benefit from the auto-instructional units, they did not represent the materials which were to be finally evaluated.

Utilization of Materials

No attempt was made to impose a particular methodology upon the participating teachers; rather it was hoped that profitable ideas, suggestions and criticisms would emerge as the teachers organized their own methods of using the films. Several major common denominators did exist, however, in that in the majority of classes (1) the films were used individually by one child at a time, (2) the sequence of presentation followed was that indicated by the numeration of the films, (3) occasional teacher supervision preceded independent use of the materials by the children.

Although some teachers reported that they did not feel the children could satisfactorily use the machines without the teacher's help and others occasionally employed one pupil as a monitor for

another, most of the film usage consisted of one child working independently. In only two of the fourteen classes were teaching booths provided for the pupils while they were using the machines. The amount of time spent by a single child with the materials varied from about ten minutes to thirty minutes per day, with a certain amount of irregularity being found in some of the classrooms. In some instances children were permitted to complete as many films as possible in their allotted time period; whereas in others, when they finished a designated number of films they were required to repeat them.

One of the biggest differences in use of the materials was in the response required by the child. Part of this procedural variation was related to the differing chronological ages and academic level of the children. In some classes the child would write his response to each question which he speechread from the film, keep a record of his correct responses, and move on to the next film after a successful completion. In other classes the children gave their responses orally. An indication of some of the idiosyncratic applications of the equipment and materials is found in the following comments from written statements of the teachers:

1. After several group demonstrations of the machine, each child was "tested" on its use. As a child passed the test, he was allowed to use the machine with a partner, choosing any film at random. Now, specific films are assigned (in order). After viewing a film, the child writes (on a sheet with his name on it) the date and the film number. He also makes a ✓ mark if all his responses were correct. When a film is successfully completed, the next one is assigned. (Each day, children's names and film numbers are listed on the chalk board.)

The machines are used during individual speech periods -- about an hour every morning and one-half hour every afternoon -- and during any free time.

2. Each child has ten minutes or more a day on a regular schedule. The teacher selected the films for each week for each child.

   This plan abetted rigidity in some children so the schedule had to be changed weekly.

3. In the beginning the children used the machine individually, after several months the children used the machine in small groups. One child being the teacher or operator of the machine.

4. My class consists of eight multiply handicapped hard-of-hearing children. The equipment was so set up that the voice could be transmitted through the desk binaural aid sets. The children viewed films, attempted to say the words as they heard them, and when instructed to, wrote the words. Following viewing of a single film a variety of follow-up activities were presented.

   a. spelling tests (words given orally by teacher)

   b. illustrating words on paper or at board, e.g.:

   c. fill in blanks, e.g.:
      The boy was sick.
      The _____ came to see him. (nurse)

   d. oral questions or guessing games, e.g.:
      It is red, white and blue.
      It has stars and stripes.
      We see it on a pole.
      What is it? (flag)

      Where do you sleep? (bedroom)

flag	snowman
nurse	bedroom

Testing of Students

As will be discussed in the Results section, it was not felt that a definitive measure of student improvement due to utilization of the films alone could be obtained without radically circumscribing the ways in which the teachers would be permitted to handle the materials. An attempt was made, however, to determine whether

improvement in speech reading ability would be noted in the children at the conclusion of the project. To this end, the Illinois Communication Scale, (Appendix B), a test of the ability to speech read single words, sentences, and questions about a story, was administered to the classes both prior to and following the introduction of the films.

Each of the classes was visited by a research staff member in the Fall and Spring of 1966-67 and 1967-68. As the experimental films had not been provided the teacher by the end of the 1966-67 school year, the children in the classes during that year can be viewed as a control group. Sixty-seven students were involved in this first set of pre- and post-tests. Thus, two measures of speech reading ability, one at the beginning of a school year and the other at the conclusion of a year in which the auto-instructional units were in the classroom but not fully utilized, due to the absence of experimental films, were obtained. The last measure, or post-test can, with certain reservations, be viewed as an index of progress in speech reading due to traditional methods of instruction.

The testing conducted during the 1967 school year yielded an indication of speech reading ability, as measured by the Illinois Communication Scale, prior to and after one school year's experience with the research program and materials. Twenty-nine of the children who were involved in the first year's testing remained in the project during the second year. A total of seventy-two children comprised what could be called the experimental group, with twenty-nine having had one year's practice with the machines and films and thirty-eight being new to the project.

Evaluation by Teachers

Formal evaluations by each of the participating teachers were obtained at two stages of the research. A questionnaire was completed eight months after the Orientation Workshop, during which time the teachers had been using the equipment and some of the original films. A second evaluation was submitted in the spring of 1968 after the last series of post-testing of the students. The teachers were asked to provide as comprehensive a critique as possible of the quality and effectiveness of the program materials and to specifically comment on a) the equipment, b) film content and structure, c) pupil reaction, d) appropriateness of the films for the age group being taught and e) needed modifications.

RESULTS

Student Performance

As noted previously, the subjects were divided into three groups. Group I consisted of 38 children from the twelve participating classes, who were tested only during the Fall of 1966 and the Spring of 1967. They had been exposed, for one school year, to some of the original sample films, but not to the experimental release prints. This Group could thus be viewed as a semi-control group, for whom traditional methods of instruction were less modified than for Groups II and III. Group II included 43 children who entered the research in the Fall of 1967 and had one year's experience with the experimental films and no prior exposure to or practice with the equipment or films. Group III was comprised of the 29 pupils who were tested over a two year period and who had one academic year with the practice films and one year with the experimental films.

The Illinois Communication Scale (ICS), Form B, a filmed test of speech reading ability, containing 50 items, was administered as a pre- and post-test to the three groups. Groups I and II received one administration each of the pre- and post-test (the former group in the 1966-67 school year and the latter in 1967-68). Group III was given the test four times, one time each prior to the beginning of school years 1966-67 and 1967-68, and again at the conclusion of each of these school years.

Table 1 summarizes the composition of the three groups by age and initial average raw score on the ICS. The similarity of pre-test scores suggests comparability of the three groups on the variable of speech reading proficiency. Median age is somewhat dissimilar, however, with one year's difference occurring between each group.

Table 1. Composition of Three Groups of Participating Pupils

Group	I	II	III
N	38	43	29
Age Range	5-0 to 16-0	4-0 to 11-11	6-0 to 19-11
Median Age	8-6	7-6	6-6
Modal Age	7-6	7-6	6-6
Average Pre-Test Score on ICS	22.71	22.79	20.00

In Table 2, the average pre-test raw score is presented by age group and reflects a relatively linear progression of increased performance with advanced age but not to the extent that age alone could be considered the significant variable. The linearity is also not as pronounced as that obtained on the 417 subjects who comprised the standardization population of the ICS (Cf. Withrow, F. B., The Development of a Receptive Communication Scale for Deaf Children). Another interesting difference between the scores of the three groups of this study and that of the standardization group is that at almost every age level, the present groups had average scores which were

considerably higher than that of the standardization sample. This is reflected in Table 3 and, while size of sample for each age group varies, suggests differences in the two populations which will be discussed with regard to the results of this study.

Table 2. Average Pre-Test Raw Score by Age

Age	Group I	Group II	Group III
4-0 to 4-11	———	17.00	———
5-0 to 5-11	12.00	12.00	16.00
6-0 to 6-11	17.40	22.40	15.69
7-0 to 7-11	21.66	22.00	27.33
8-0 to 8-11	22.37	23.88	20.00
9-0 to 9-11	25.20	22.50	29.33
10-0 to 10-11	23.00	37.50	43.00
11-0 to 11-11	40.00	33.00	———
12-0 to 12-11	26.00	———	15.00
13-0 to 13.11	———	———	———
14-0 to 14-11	———	———	15.00
15-0 to 15-11	———	———	———
16-0 to 16-11	32.00	———	———

Table 3. Comparison of Average Pre-Test Raw Scores of Research Subjects with Scores of Standardization Population - by Age

Age	Standardization Population	Present Research Groups		
		I	II	III
4	———	———	17.00	———
5	———	12.00	———	16.00
6	8.00	17.40	22.40	15.69
7	13.00	21.66	22.00	27.33
8	18.50	22.37	23.88	20.00
9	21.00	25.20	22.50	29.33
10	24.75	23.00	37.50	43.00
11	27.40	40.00	33.00	———
12	29.25	26.00	———	15.00
13	31.50	———	———	———
14	31.50	———	———	15.00
15	———	———	———	———
16	———	32.00	———	———

Change in performance on the ICS by the three groups from pre-test to post-test is shown in Table 4.

Table 4. Change in Performance on Illinois Communication Scale

Administration	Average Raw Score		
	Group		
	I	II	III
Pre-Test 1 (Fall, 1966)	22.71	22.79	20.00
Post-Test 1 (Spring, 1967)	27.63	25.51	25.86
Pre-Test 2 (Fall, 1967)	———	———	26.86
Post-Test 2 (Spring, 1968)	———	———	29.96
Degree of Improvement	21.74%	12.00%	50.00%*

*Represents percentage of improvement between first pre-test (Fall, 1966) and second post-test (Spring, 1968) -- two academic years.

The greatest improvement in speech reading score was made by Group III which, although younger, on an average, than either of the other two groups, had had use of language films for two years, rather than one. Group I, which did not have advantage of the experimental release films but had used some of the earlier films, showed substantially more improvement (21.74% vs. 12.00%) than Group II, which had had one year with the experimental films but no previous experience with the equipment or similar films.

Teacher Evaluation

While brevity would be served by summarizing teacher comments and criticisms, it is felt that a more valuable contribution can be made by categorizing some of the actual and representative statements and then discussing the major commonalities of teacher opinion. Each of the following numbered statements, under the topic headings: equipment, film content and structure, pupil reaction, appropriateness for age group being taught, and needed modifications, represents a comment by one classroom teacher or program supervisor.

Equipment:

1. Excellent, easy to use, durable. The cartridges represent a superior innovation and are a major improvement over film requiring threading, rewinding, etc.

2. I think the machines are great.

3. We found it difficult to view the films in regular classrooms in which there was sunlight or artificial light. (Only one teacher commented on this.)

4. Children unable to stop machine to read sentence or to look more closely. Should be a pause button with off-on switch.

5. Two different speeds of machines make interchange between them awkward.

6. I think the ease in using the projector is a great advantage, although I do wish our headphone sets could have fitted in the jack.

Film Content and Structure:

1. Unsatisfactory, disappointing. Considering the amount of time spent in planning, organizing and producing the series, it fails, in my opinion, as a really useful, constructive,

coordinated classroom aid. The organization of vocabulary is so unrelated within a single film that it was very difficult to develop follow-up activities that would have broadened the pupils' knowledge or increased their expressive-receptive experiences. The use of the units resulted in one lesson after another of unrelated, isolated words. It was very difficult, in fact impossible, to select a film to correlate with any phase of the curriculum being developed.

2. Lipreading practice should include both visual and auditory information. Occasional, careful use of auditory cues alone may serve particular purposes but probably only under the direct control of a teacher. The use of the visual without sound should occur rarely if at all. Silent films, even for lipreading practice, seem to have limited value.

   Lipreading of single words is of limited value. Experience with sounds and isolated words is pertinent for developing speech and for leading children to understand certain fundamental intermodality relations. Ideally all such teaching probably should be under the direct control of the teacher rather than for independent practice or for self teaching. Since the child's performance is central to work with phonologic features, it is difficult to conceive of effective predetermined materials.

   Series of unrelated words or sentences for lipreading practice fail to enhance logical, linguistically oriented thinking. Lipreading should be developed as a linguistic skill rather than as a visual skill.

   Frequent repetition or practice of materials isolated from purposeful communicative function may lead some children to derive or conclude something other than the teacher's intended principles or patterns. Such erroneous conclusions may be nearly impossible to detect in materials presented primarily in the simplified stimulus-response activities which the teaching machine, self teaching or independent practice media seem to require.

3. Preposition films too unrealistic; request word STOP written on red blank space; persons in films too expressionless. Use of a single word is confusing and not what a child sees in daily unstructured language situations.

4. Too many words on one film; not enough repetition for first year students. Some words not pronounced correctly by woman on films. Some one syllable words seem to have two.

5. We eliminated all films that showed prepositional phrases in which situations were unrealistic, such as a tree in a bathtub, etc.

Pupil Reaction:

1. The machine fascinated the children.

2. The inherent appeal and the apparent entertainment value of materials presented on visual projection equipment is great All of the children with whom we have used such equipment seemed to be entranced, regardless of the content of the material and regardless whether or not they understood the material presented. Consequently, it is most urgent that the materials presented in this fashion effectively serve the underlying purposes of language instruction.

Appropriateness for Age Group Being Taught:

1. It seemed to me that the materials I received - the simple one-word exercises - would be a great help to young deaf children in beginning language and lipreading work; in other words, three to five year olds. At the level I teach, six and seven year olds usually in their third year of school, we continue vocabulary building but move more into verb phrasing and simple sentences.

2. Many of the films involved language principles and other work too advanced for use with our pupils (ages five and six years). We chose about fifteen that were appropriate for our use. Our children are unable to read and write cursive writing which accompanied pictures on film.

Needed Modifications:

1. Brief film sequences which show experiences similar to ones a classroom of children might have, (making cookies, making jello, playing with a new toy, etc.) could be valuable. The children in the film should have normal speech and language and should talk about what they are doing (sound track needed). Following this on the film, the filmed children could ask questions about the activity -- for the viewing child to answer in writing or in speech, with teacher (or aide) monitoring.

Perhaps animated cartoons could be developed to depict basic number relations as taught in kindergarten, first and second grade. Vocabulary such as enough, too many, etc. could be demonstrated and appropriate questions could be asked on accompanying work book sheets or on the film or both.

There is need for single concept films to present particular verbs or combinations of verbs. Numerous examples for various verbs and verb functions would be useful.

Short story sequences portrayed on film about which the teacher could develop language and vocabulary at the level appropriate for her class could be of considerable practice and enrichment value.

Films designed to teach specific vocabulary should be developed. For example, to give practice in the learning of names of tools, a film showing a scene in a shop where a teacher could show tools, say what they were, show the written words, use them, and say and write sentences about them.

2. Revise organization of content into learning units. Consult teaching guides and curriculum outlines for Math, Science, Social Studies, Health, Arts and Crafts.

   Use the same idea for the presentation of action verbs. What better way for children to understand difficult verb concepts than to see them lively and moving rather than looking at still pictures.

3. Films would be more helpful if vocabulary was arranged in units to be used with units of study currently taught in classroom.

In summary, the participating teachers tended to agree on the interest appeal and technical adequacy of the equipment, enthusiastic reception of the students, and preference of sound to silent films. The major criticisms expressed by almost all of the teachers concerned the content of the films. The concensus appeared to be that single, unrelated noun vocabulary films were not as appropriate or beneficial as unit or category oriented films or descriptive stories would be. With regard to the preposition films, several of the participants

contended that use of "unrealistic" situations, e.g. "The tree is in the bathtub" was confusing and possibly detrimental.

Variation in the level of work being done by deaf students of similar ages in different programs was reflected in the fact that some teachers felt that the films were too elementary and others that they were too advanced. For example, one teacher of five and six year olds commented that the films were too difficult and that her pupils were unable to read and write the cursive writing which accompanied the pictures. Another teacher of pupils of approximately the same age felt that the films would be most appropriate for three to five year old children.

A wide variation was also seen in the relative sophistication of the participating teachers in the concepts and procedures of individual, child-controlled learning and programmed instruction. The criticisms expressed by some of the teachers left the impression that they were not accustomed to having their pupils work independently and that they had difficulty organizing opportunities for this. These teachers appeared to want movies which could be shown to the entire class rather than auto-instructional films which could function either as a part of the language curriculum or independent of it.

DISCUSSION AND CONCLUSIONS

The results of this study are somewhat unclear because of the divergence in teacher application of the experimental films. While flexibility of procedure was an intentional part of the research design, it has made it impossible to state conclusively the degree and source of benefit obtained by the students. Analysis of scores on the Illinois Communication Scale does suggest, however, that the speech reading ability of those students (Group III) who had two years exposure to the films and equipment was significantly improved. In addition, teacher evaluation revealed general agreement that auto-instructional films designed to facilitate language and speech reading development have considerable potential for profitable use with young deaf children.

As all possibly relevant variables in the research could not be controlled, it is difficult to explain why Group I, which did not have benefit of the experimental films, appeared to achieve at a higher level on the ICS than Group II. Differing composition of the two groups in terms of intelligence, previous education, and quality of present educational program is an obvious possibility. Age of the children is a second consideration; Group I was, on the average, one year older than Group II. Perhaps the most logical explanation, however, is that the samples of the original language films which were provided to the teachers of Group I children did not differ as greatly from the experimental films as had been thought. Thus, if this were

true, Group I was not, in fact, a control group, but rather, a group which was using instructional media that was quite similar to that used by the supposedly experimental group. Because of the relatively moderate increment in speech reading ability displayed by either Group I or Group II, the finding that the entering ability, or pre-test scores on the ICS, of the children in both of these groups was considerably higher than the score of the ICS standardization population, becomes fairly interesting. While admittedly conjectural, it may well be that the children chosen by the participating programs were already more proficient in language and speech reading than the "typical" deaf child of comparable age. Thus, the films may have been elementary for these particular children, which could account, in part, at least, for the moderate, rather than marked, improvement in language skills.

Both the ICS results and teacher comments suggest that the films, as presently constituted, may be most effective with young, beginning level deaf children. Whether the most appropriate age level is 3 through 5 or 6 years, however, depends on the provision of a response from the child which does not require a skill, e.g. cursive writing, which he does not currently have.

The performance of Group III, i.e., an improvement in measured speech reading ability of 50 per cent from first pre-test to last post-test, provides another clue as to a possible reason for the more limited progress of Groups I and II. It would appear that one academic year is too brief a period for use of experimental films to be reflected in

student performance. Group III, unlike Groups I and II, had two years' utilization of the equipment and films, which may, in view of the results, be the minimal time required for teacher and pupil to obtain optimal benefit. A provocative finding, which would have to be replicated in order to be viewed as significant, is that Group III's average raw score on the ICS did not decrease between the administration of the first post-test and the second pre-test, although a three month's summer vacation had intervened. In fact, a slight increase was noted (26.30 vs. 25.86), suggesting satisfactory retention of the skills which had been learned.

One of the intangible but substantive findings of the study was that the cooperating teachers varied greatly in their understanding and application of individualized instruction, purposes of media and objectives of the present research. Unfortunately, all of the teachers had not attended the orientation workshop but even some of those who had did not seem to realize that the films which they had been provided were not "finished products" but experimental efforts intended for evaluation. Because of this misunderstanding, a few of the teachers seemed to feel that if the films did not meet their expectations or were not, to them, appropriate, they were entitled to discontinue using them with the children, or to reduce the amount of time spent on their usage. Other teachers, while equally critical of the film content, continued to employ the films, with extremely ingenious adaptations when necessary.

While the point was well taken that unrelated noun vocabulary was not the most advantageous content of language films, many of the teachers who expressed this criticism stated that they had not attempted to teach the vocabulary prior to the children's use of the films or to integrate the film content into their on-going curriculum. The impression received was that all but a few of the teachers were unable to see the value of material that was unrelated to their presentations, or to promote integration. Those teachers who, in the investigators' subjective opinion appeared to make most effective use of the films, were those who prior to the introduction of "teaching machines" had minimized "group" instruction of their children and had placed stress on the child's being able to work independently. It would appear that unless a teacher is committed to the philosophy that learning can and must, take place without teacher control, benefit derived from any instructional materials will be extremely minimal.

These comments reflect the need for more intensive instruction of teachers prior to the utilization of auto-instructional materials, and the provision of on-going consultation. One of the limitations of the study was that in an effort to allow freedom of application and creativity, sufficiently specific guidelines and directions were not given. A major recommendation emerging from the study would be that a comprehensive orientation to the concepts of programming, apart from hardware considerations, be presented to all teachers before distribution of materials.

SUMMARY

Three hundred and six 8mm cartridge-type, continuous loop films were produced to provide deaf children instruction in and practice with noun vocabulary, question forms, prepositions and speech reading. The films were designed to be used in easily operated projectors with self-contained TV-type screens.

For evaluation purposes, the films and projectors were placed in twelve classes for the hearing impaired, taught by teachers who had been given the opportunity to attend a three-day orientation workshop on the objectives and uses of the materials. The amount of time spent on the films by individual children and the method of presentation was to be determined by the teachers.

Thirty-eight children (Group I), with a median age of 8-6, worked with the projectors and a selected sample of language films, which were similar to but not a part of the experimental films, for one school year. Forty-three children (Group II), ages 4 to 14, median age 7-6, used the experimental films for one year, and twenty-nine children (Group III), median age 6-6, were involved in the project for two years, using both the selected sample of language films and the ones designed specifically for this study.

To obtain an indication of progress in speech reading ability, the Illinois Communication Scale, Form B, a 50 item filmed test of speech reading of single words, sentences and descriptive stories was administered to each participating class prior to each of the two

academic years and at the end of each of these years. Detailed evaluations by teachers were also obtained to assess the over-all effectiveness of the materials, and to identify needed modifications or improvement. Because of the limited experimental controls employed in the research design, the findings on both the Illinois Communication Scale and the teacher evaluations are suggestive rather than conclusive.

Increases in measured speech reading ability were noted in all three groups, with the most substantial gain (50% improvement over two years) being made by Group III which, although younger than Groups I or II, had had exposure to both series of films over a two year period of time. Increments of 21.74% and 12.00% were achieved by Groups I and II, respectively. Reasons suggested as possible explanations of Group I's superiority over Group II were 1) differing composition of the two groups in terms of intelligence and previous education, 2) age differences and 3) greater similarity between the non-experimental sample films and the experimental films than had been thought.

Teacher evaluations revealed general agreement as to the potential value of language and speech reading films, the interest appeal and technical adequacy of the equipment, enthusiasm of the participating students and a preference for sound rather than silent films. The major criticism related to film content. Almost all of the teachers objected to films containing unrelated noun vocabulary, contending that subject unit or category oriented presentations would be more appropriate and beneficial. While no concensus was revealed with

regard to the age group for which the films appeared most appropriate, there was some indication that although the approach could be profitably applied with any age, the present films were most suitable for the age range three to about six years.

The influence of teacher understanding of and commitment to the principles of child directed, independent learning, and programmed instruction on effective application of auto-instructional filmed materials was discussed. It was pointed out that one of the limitations of the study was inadequate orientation and lack of continuous consultation and guidance. The recommendation was made that, in addition to incorporating some of the excellent teacher comments on the composition of the films, it is essential to provide a comprehensive orientation on the concepts of programming and permitting students to work independently, prior to further distribution of films.

REFERENCES

Furth, H., A psychologist's view on the slow-learning deaf child. Proceedings of the 40th Meeting of the Convention of American Instructors of the Deaf, Washington, Government Printing Office, 1962, p. 188.

Lowell, E., A point of view regarding the multiple handicapped deaf. Proceedings of the 40th Meeting of the Convention of American Instructors of the Deaf, Washington, Government Printing Office, 1962, p. 64.

Quigley, S. P., and Frisina, D. R., Institutionalization and Psycho-educational Development of Deaf Children, CEC Research Monograph, Series A, No. 3, 1961.

Withrow, F. B., The development of a receptive communication scale for deaf children. Final Report - Grant No. 32-23-000-1027. U. S. Dept. of Health, Education, and Welfare. Office of Education, Bureau of Research, 1966.

ILLINOIS COMMUNICATION SCALE

NAME: _____ SCHOOL _____

BIRTHDATE: _____ DATE: _____ I.Q.: _____

AVERAGE ACHIEVEMENT SCORE: _____

PREVIOUS YEARS IN ATTENDANCE: 1, 2 3 4 5 6 7 8 9 10 11 12 13

DEAFNESS OF RELATIVES:
M
F
S
M and F
M, F and S

HEARING LEVELS IN BETTER EAR (Average for 500, 1000, 2000 CPS. ISO 1964):
90+
80 - 90
70 - 80
60 - 70
50 - 60
40 - 50

SHAPE OF AUDIOGRAM:
Less than 12db
Greater than 12db
Flat
Rising Curve
U-shaped Curve
N.B. 500 CPS

USED HEARING AID DURING TEST:

☐ YES ☐ NO

****

SCORE

FORM	PART I	PART II	PART III	PART IV	PART V	TOTAL
"A"						
"B"						
"C"						
"D"						
"E"						

REMARKS: _____

_____

_____

_____

_____.

Test administered by: _____

Name _____ Age_____ School_____

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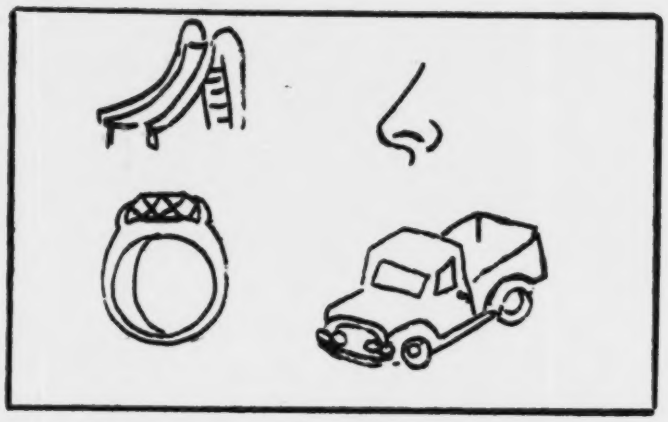

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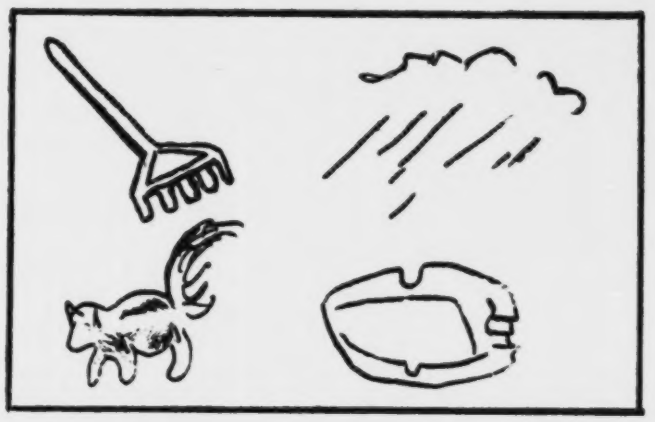

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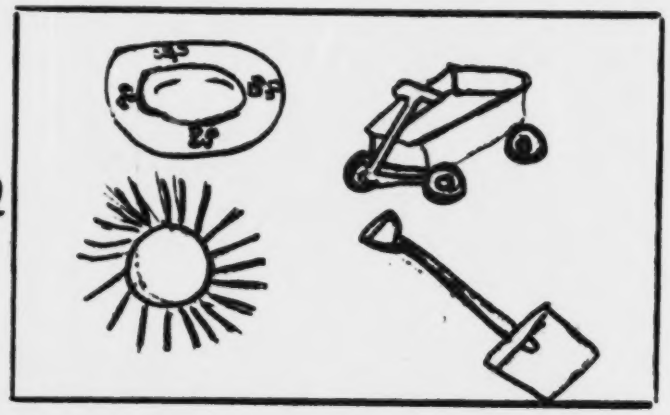

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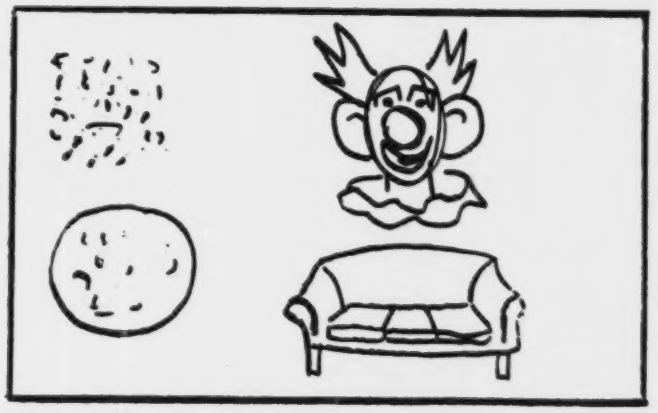

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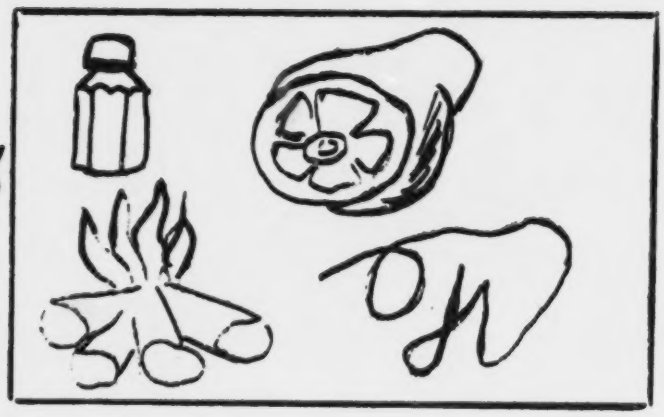

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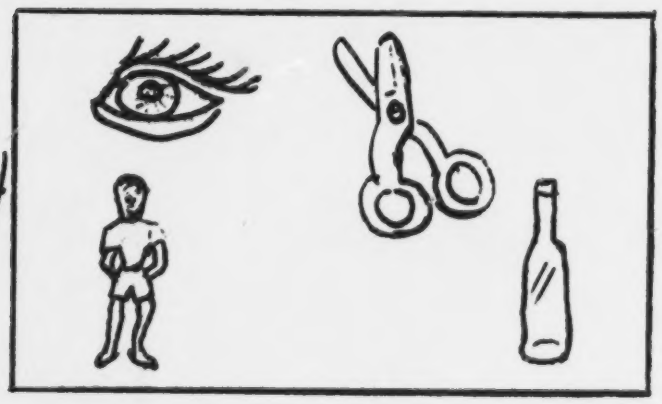

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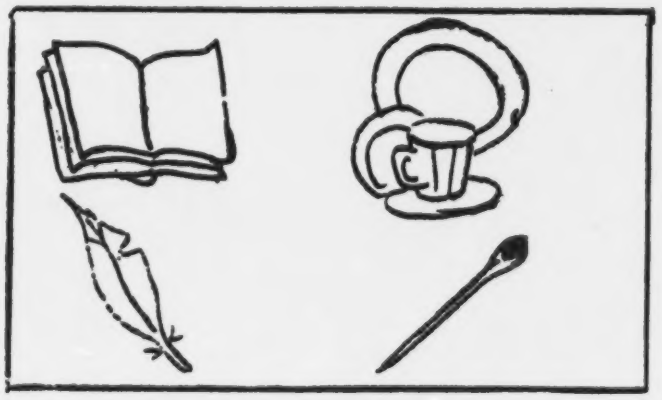

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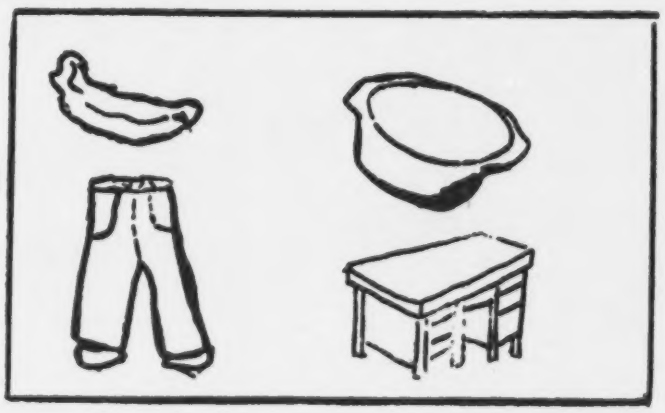

Name _____ Age ____ School _____

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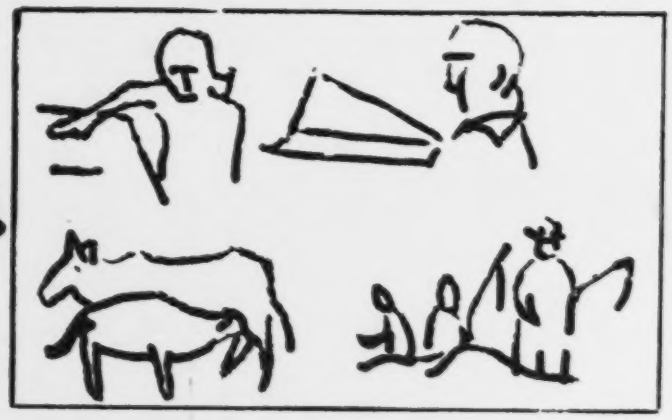

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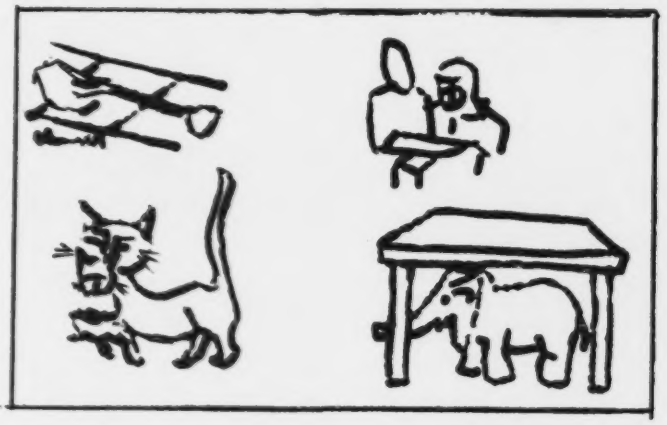

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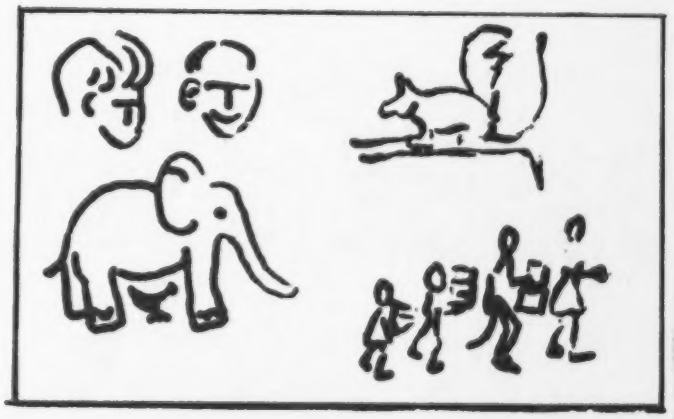

FORM "B", PART III.

1. ☐ There were six hats in the bag.
   ☐ Three hats.
   ☐ Two hats were in the bag.
   ☐ No hats were in the bag.
   ☐ _____
   _____.

2. ☐ Under the chair.
   ☐ The brown paper bag was on the table.
   ☐ There was no paper bag.
   ☐ The bag was in the wastebasket.
   ☐ _____
   _____.

3. ☐ It flew into the air.
   ☐ It fell over and things spilled out of it.
   ☐ Water came out of the wastebasket.
   ☐ Nothing happened to the wastebasket.
   ☐ _____
   _____.

4. ☐ The balloons were in the little girl's purse.
   ☐ In the glass.
   ☐ All of the balloons were in the bag.
   ☐ The little girl did not have any balloons.
   ☐ _____.
   _____.

5. ☐ The dog found it.
   ☐ The little girl found the paper bag.
   ☐ Mother found the paper bag.
   ☐ There was no paper bag.
   ☐ _____
   _____.

6. ☐ She chewed it.
   ☐ The little girl blew up the balloon.
   ☐ Put it in her shoe.
   ☐ There were no balloons.
   ☐ _____
   _____.

7. ☐ The hat was blue.
   ☐ It was orange
   ☐ She did not have a hat.
   ☐ Red and yellow.
   ☐ _____
   _____.

8. ☐ I don't know who had a party.
   ☐ Mother and father had a party.
   ☐ The little girl.
   ☐ The children.
   ☐ _____
   _____.

9. ☐ The blue balloon did pop.
   ☐ No it did not pop.
   ☐ Yes it did.
   ☐ It flew away.
   ☐ _____
   _____.

10. ☐ A large brown paper bag was in the wastebasket.
    ☐ A toy airplane was in the wastebasket.
    ☐ Some trash was in the basket.
    ☐ A book was in the basket.
    ☐ _____
    _____.

FORM "B", PART IV.

1. ☐ I don't know.
   ☐ Melvin climbed up into the tree.
   ☐ No, he did not.
   ☐ Yes, he did.
   ☐ _____
   _____.

2. ☐ When it was snowing.
   ☐ At night.
   ☐ One windy day.
   ☐ After school.
   ☐ _____
   _____.

3. ☐ The color of the kite was brown.
   ☐ Red.
   ☐ The kite was yellow.
   ☐ Black.
   ☐ _____
   _____.

4. ☐ Sally.
   ☐ The girl's name was Barbara.
   ☐ Her name was Pam.
   ☐ Jane.
   ☐ _____
   _____.

5. ☐ Grandmother had a red kite.
   ☐ Pam.
   ☐ There was no red kite.
   ☐ Father.
   ☐ _____
   _____.

6. ☐ The man at the store.
   ☐ Their neighbor.
   ☐ Uncle Jim.
   ☐ Mother gave them rags for the tails of their kites.
   ☐ _____
   _____.

7. ☐ There were three boys flying kites.
   ☐ Seven
   ☐ One boy.
   ☐ Four boys were flying kites.
   ☐ _____
   _____.

8. ☐ It was raining outside.
   ☐ It was a windy day.
   ☐ It was snowing.
   ☐ It was broken.
   ☐ _____
   _____.

9. ☐ Into the water.
   ☐ The kite fell into the boat.
   ☐ It fell in a tree.
   ☐ The blue kite fell in the street.
   ☐ _____
   _____.

10. ☐ From the baker.
    ☐ They got them from their teacher.
    ☐ At the police station.
    ☐ The children got their kites at the store.
    ☐ _____
    _____.

FORM "B", PART V.

1. ☐ Hi there!
   ☐ Hello.
   ☐ Come on.
   ☐ Good-bye.
   ☐ _____
   _____.

2. ☐ Has the mailman come?
   ☐ Do you have enough money?
   ☐ Why are you so late?
   ☐ Can't you see I'm busy?
   ☐ _____
   _____.

3. ☐ Did you mail the letter?
   ☐ How many girls went to the park?
   ☐ Can I see you this afternoon?
   ☐ Do you want some ice cream?
   ☐ _____
   _____.

4. ☐ I smell popcorn.
   ☐ Open the window.
   ☐ Use the dictionary.
   ☐ Put some wood on the fire.
   ☐ _____
   _____.

5. ☐ I can't read without my glasses.
   ☐ I hit my thumb with a hammer.
   ☐ They had a good time at the party.
   ☐ They were very late getting to work today.
   ☐ _____
   _____.

6. ☐ Close the door.
   ☐ Put on your pajamas.
   ☐ Go to bed.
   ☐ Go home.
   ☐ _____
   _____.

7. ☐ It snowed very hard last night.
   ☐ I can't find a place to park the car.
   ☐ I bought a new car last week.
   ☐ It was good to see so many old friends.
   ☐ _____
   _____.

8. ☐ What time is it?
   ☐ What are you doing?
   ☐ What happened over there?
   ☐ What's the matter with him?
   ☐ _____
   _____.

9. ☐ January was very cold this year.
   ☐ He brings his lunch in a brown bag.
   ☐ He is a long way from home.
   ☐ January is a long month.
   ☐ _____
   _____.

10. ☐ He cooked the fish.
    ☐ Let's go for a walk.
    ☐ Let's get in out of the rain.
    ☐ He can't hear a thing.
    ☐ _____
    _____.

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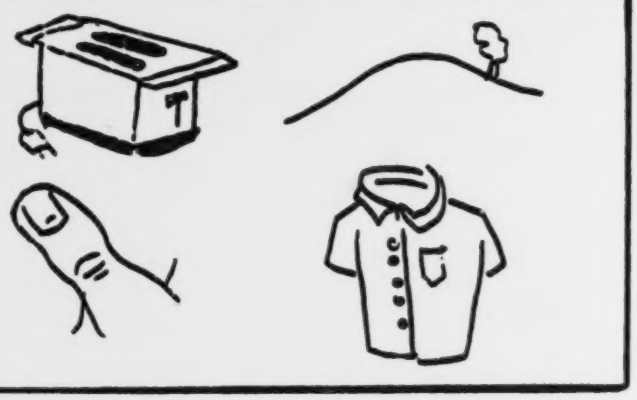

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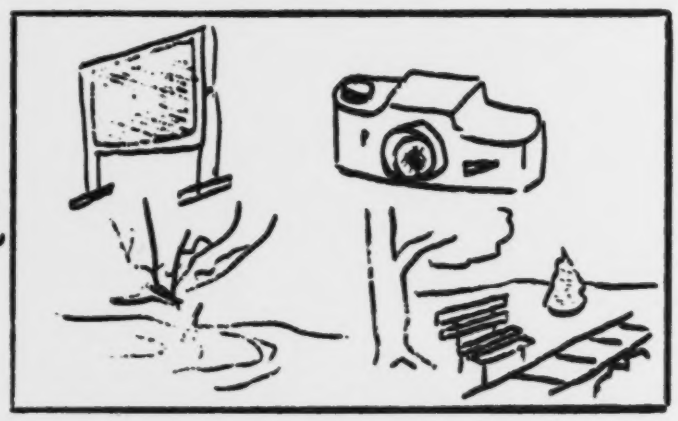

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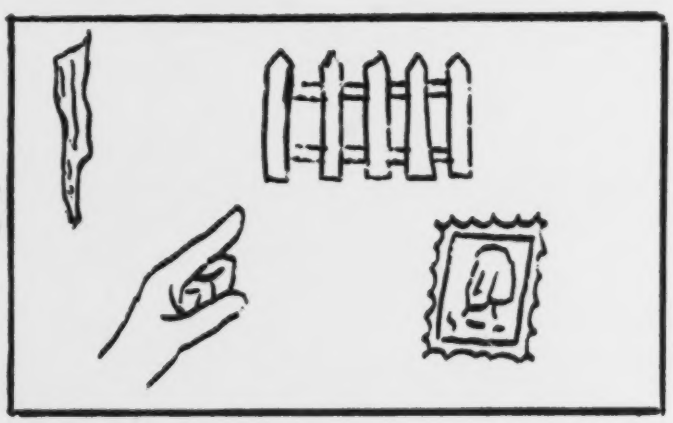

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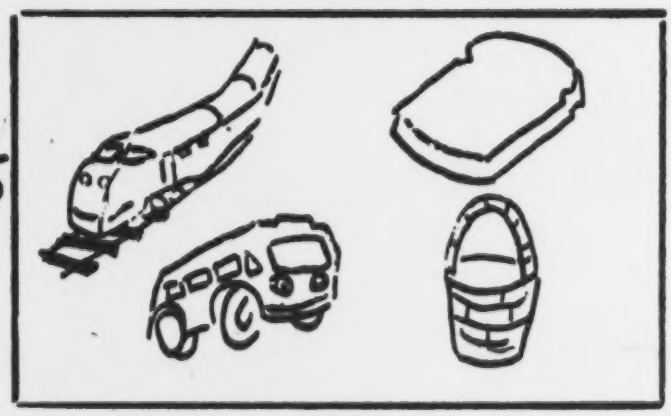

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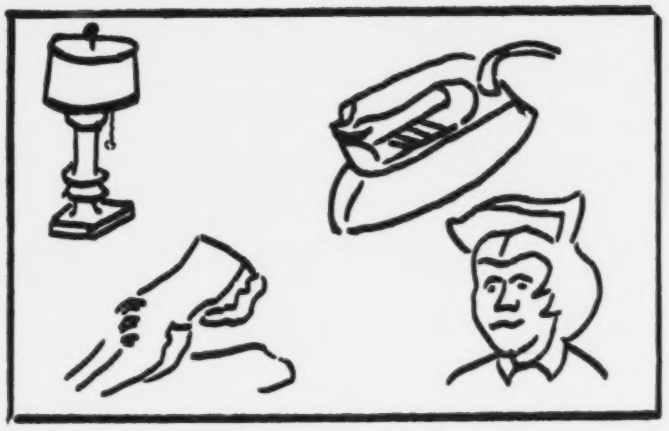

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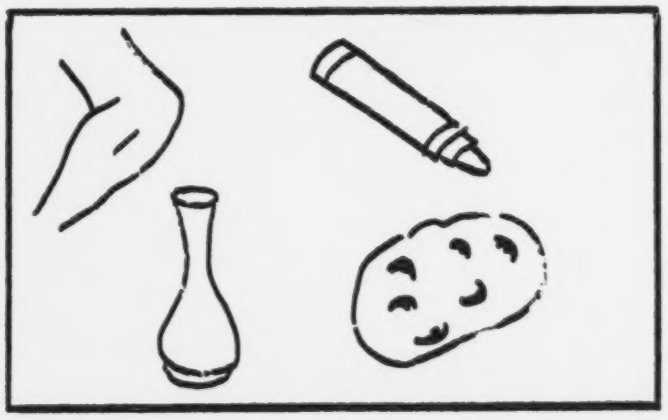

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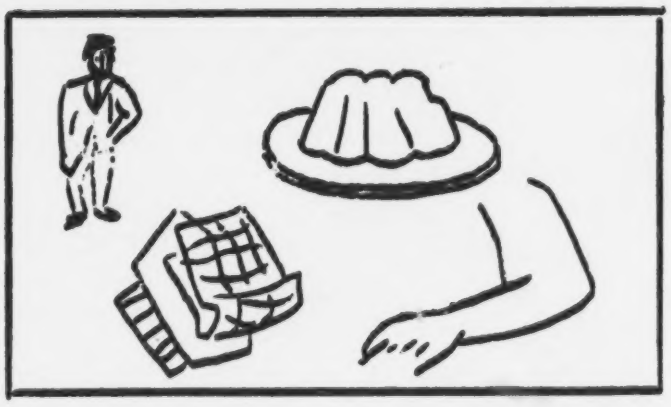

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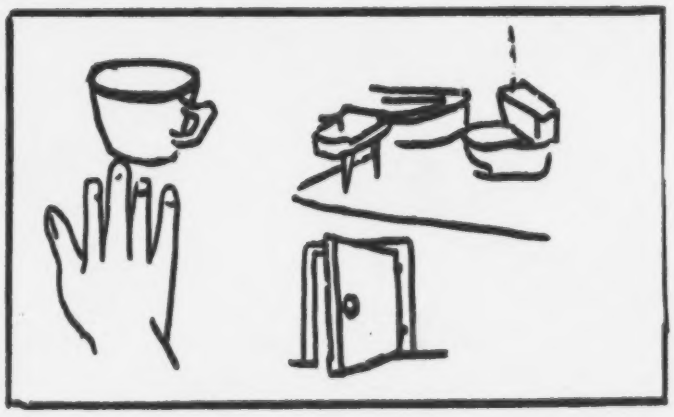

Form C Part I

Name _____ Age _____ School _____

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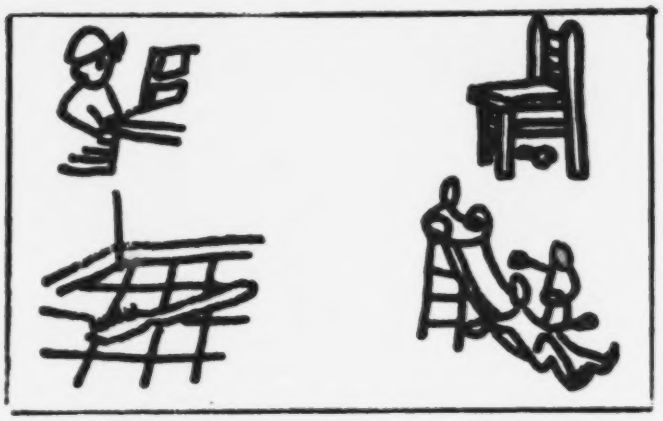

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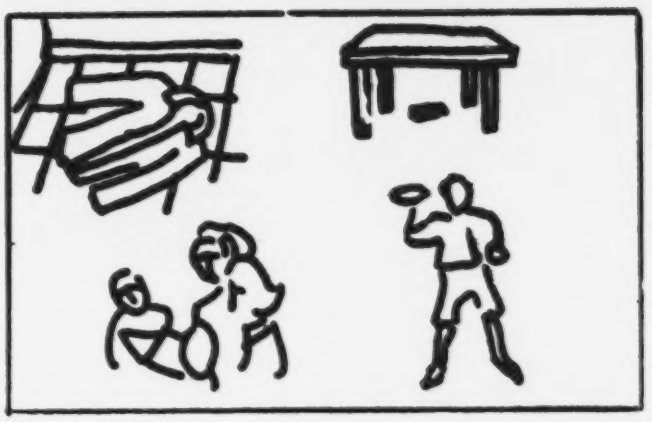

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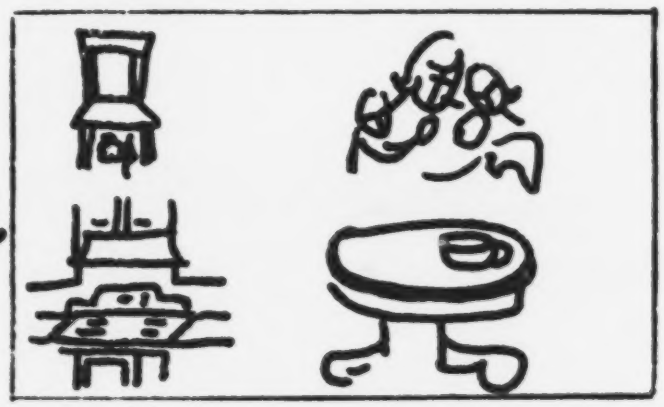

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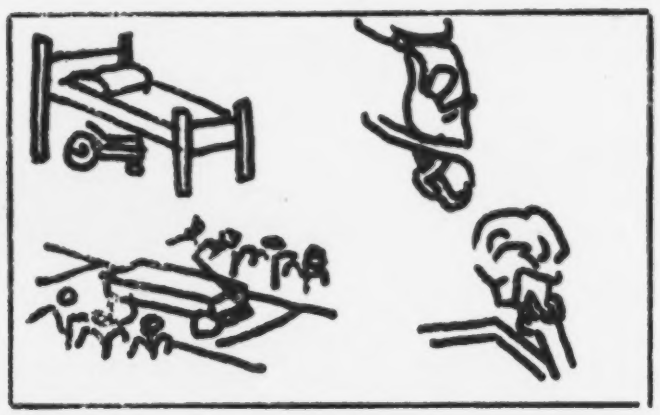

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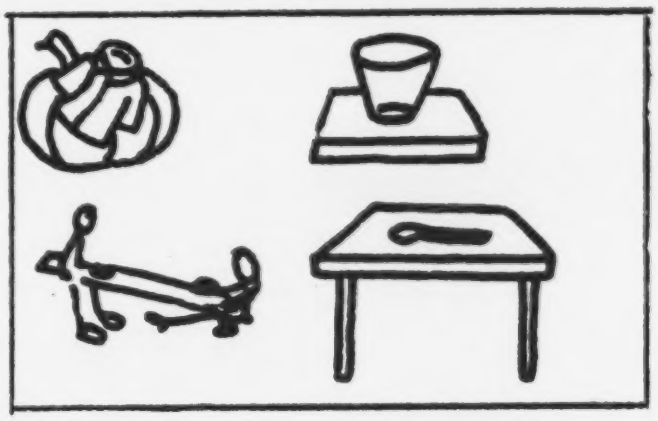

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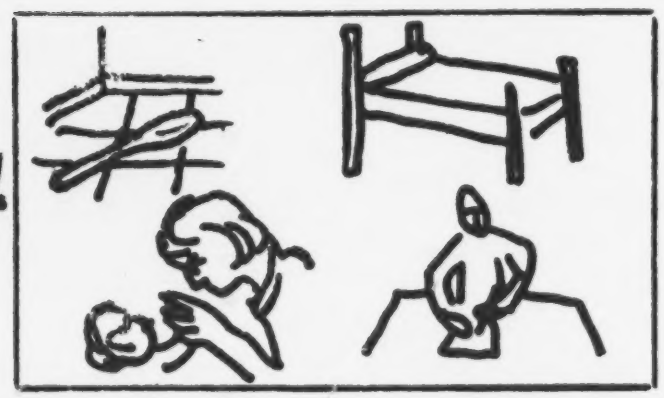

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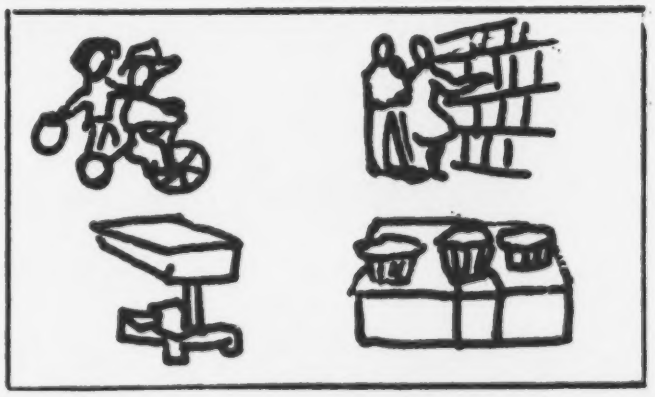

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FORM "C", PART III.

1. ☐ Grandfather ate a cookie.
   ☐ The little girl.
   ☐ There were no cookies.
   ☐ John ate a cookie.
   ☐ _____
   _____.

2. ☐ Mother
   ☐ The little dog.
   ☐ The horse made the cookies.
   ☐ No one made the cookies.
   ☐ _____
   _____.

3. ☐ On the floor.
   ☐ There was no cookie jar.
   ☐ The cookie jar was on the shelf.
   ☐ It was under the chair.
   ☐ _____
   _____.

4. ☐ The cookie jar did not break.
   ☐ Yes, it did.
   ☐ It fell off of the shelf.
   ☐ It fell on to the floor and broke.
   ☐ _____
   _____.

5. ☐ There were none.
   ☐ Five of them.
   ☐ There were six cookie jars.
   ☐ One cookie jar was on the shelf.
   ☐ _____
   _____.

6. ☐ Threw it out of the window.
   ☐ Gave it to the dog.
   ☐ The little girl ate the cookie.
   ☐ The little girl put the cookie in the cookie jar.
   ☐ _____
   _____.

7. ☐ It was green.
   ☐ The cookie jar was blue.
   ☐ The color of the cookie jar was white.
   ☐ There was no cookie jar.
   ☐ _____
   _____.

8. ☐ In the wastebasket.
   ☐ The cookies were in a box.
   ☐ Inside the cookie jar.
   ☐ The cookies were on the table.
   ☐ _____
   _____.

9. ☐ Cookies were in the jar.
   ☐ There was ice cream in the jar.
   ☐ In the jar the little girl found some candy.
   ☐ The cookie jar was empty.
   ☐ _____
   _____.

10. ☐ She fell off the stool.
    ☐ The shelf broke.
    ☐ The little girl did not reach for the cookie jar.
    ☐ The cookie jar fell off the shelf.
    ☐ _____
    _____.

FORM "C", PART IV.

1. ☐ In the wastebasket.
   ☐ Mother put the balloons in her pocket.
   ☐ She put them on the table.
   ☐ In the box.
   ☐ _____
   _____.

2. ☐ The balloons became larger.
   ☐ Pepper ran away.
   ☐ The balloon broke when Pepper hit it.
   ☐ Nothing happened.
   ☐ _____
   _____.

3. ☐ There were five boys.
   ☐ There were two boys.
   ☐ Seven boys.
   ☐ Two.
   ☐ _____
   _____.

4. ☐ Mother went to the store.
   ☐ To the baseball game.
   ☐ She went outside.
   ☐ She went to the kitchen.
   ☐ _____
   _____.

5. ☐ The man at the store.
   ☐ Mother gave them the balloons.
   ☐ A dog gave them the balloons.
   ☐ No one gave them the balloons.
   ☐ _____
   _____.

6. ☐ The wind.
   ☐ The boys did.
   ☐ Pepper's claw burst the balloon.
   ☐ The balloon did not break.
   ☐ _____
   _____.

7. ☐ The balloon was green.
   ☐ It was red.
   ☐ The balloon was blue.
   ☐ It was yellow
   ☐ _____
   _____.

8. ☐ Mother did.
   ☐ The mailman
   ☐ Pat blew up the balloon.
   ☐ Uncle Joe blew it up.
9. ☐ _____
   _____.

9. ☐ The boys spanked the baby.
   ☐ Yes, they did.
   ☐ They spanked Pepper.
   ☐ No, the boys did not spank Pepper.
   ☐ _____
   _____.

10. ☐ A hot windy day.
    ☐ After school.
    ☐ They got the balloons one cold, rainy day.
    ☐ There were no balloons.
    ☐ _____
    _____.

FORM "C", PART V.

1. ☐ I don't see it!
   ☐ Shine your shoes.
   ☐ I don't know.
   ☐ This is Ruth's brother.
   ☐ _____
   _____.

2. ☐ Have you been here before?
   ☐ Have you found your keys?
   ☐ How many fish did you catch?
   ☐ How did you get here?
   ☐ _____
   _____.

3. ☐ May I see that?
   ☐ Tom found a purse.
   ☐ The purse is black.
   ☐ May I help you?
   ☐ _____
   _____.

4. ☐ Do you want the door open?
   ☐ Can I have five dollars?
   ☐ Do you have a watch?
   ☐ Can I go to a movie?
   ☐ _____
   _____.

5. ☐ The letter is on the table in the hall.
   ☐ Put the purse on the table in the bedroom.
   ☐ She went to church with her mother.
   ☐ The church was very old and beautiful.
   ☐ _____
   _____.

6. ☐ Open the window.
   ☐ Come on in.
   ☐ Turn off the lights.
   ☐ The door is open.
   ☐ _____
   _____.

7. ☐ Your shirt is torn.
   ☐ Your room is messy.
   ☐ Your hair needs combing.
   ☐ Your shoes need shining.
   ☐ _____
   _____.

8. ☐ I'm tired.
   ☐ She's sick.
   ☐ He needs help.
   ☐ Come on.
   ☐ _____
   _____

9. ☐ Show me your sore tooth.
   ☐ Tomorrow will be Monday.
   ☐ Show me where it hurts.
   ☐ Tomorrow it may snow.
   ☐ _____
   _____.

10. ☐ That sweater is dirty.
    ☐ She came to school early.
    ☐ He picked up her handkerchief.
    ☐ She made an apron.
    ☐ _____
    _____.

Name _____ Age _____ School _____

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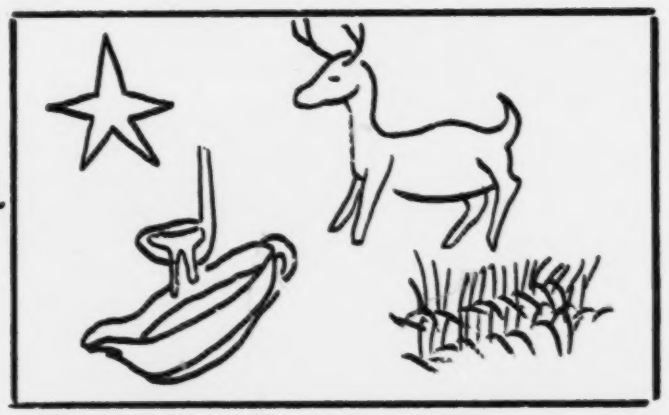

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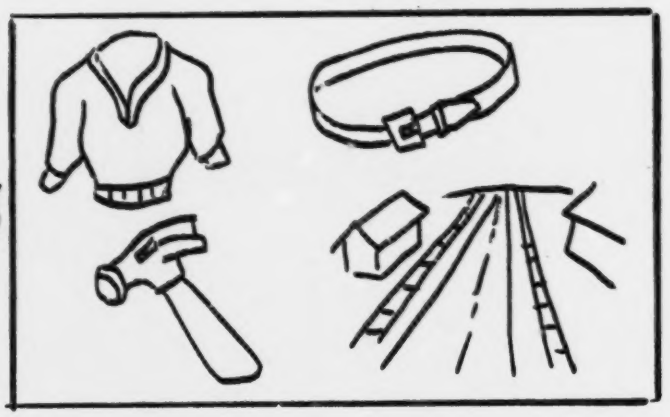

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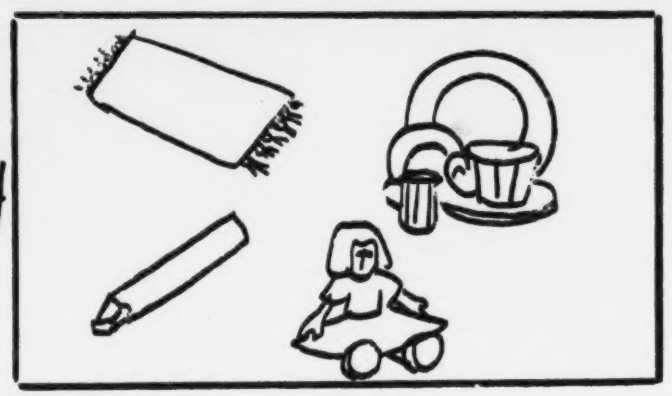

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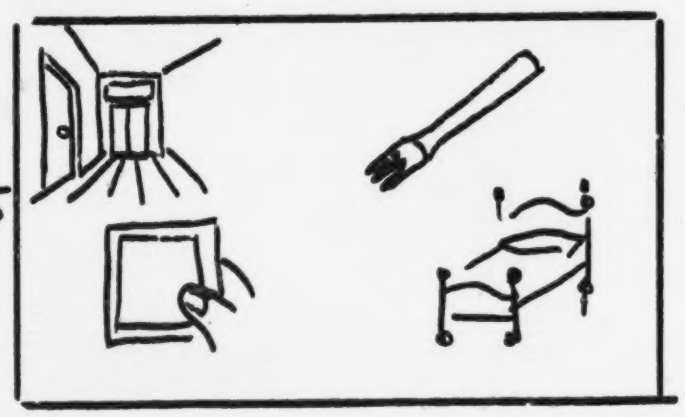

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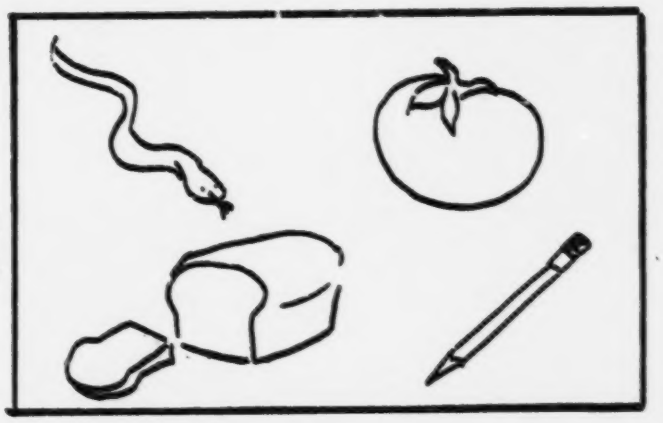

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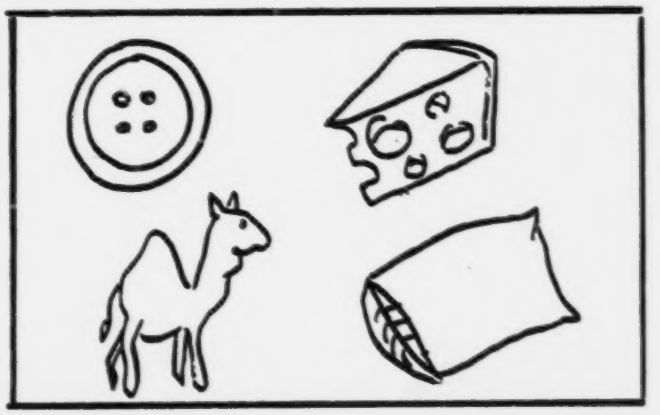

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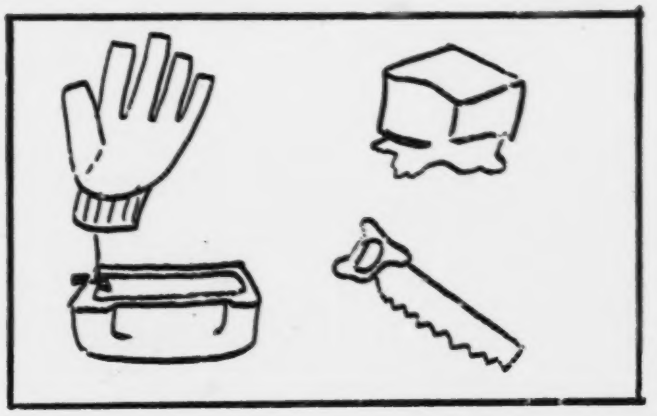

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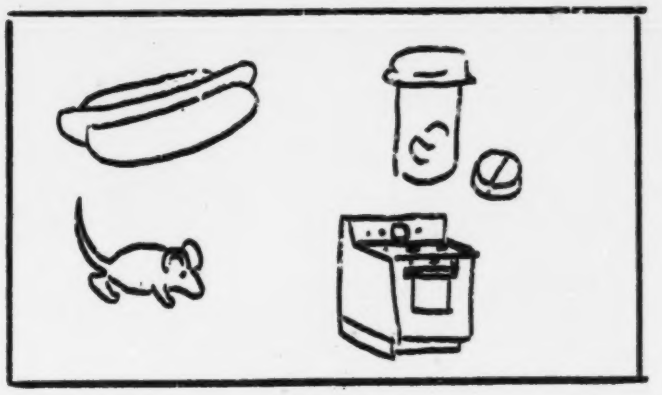

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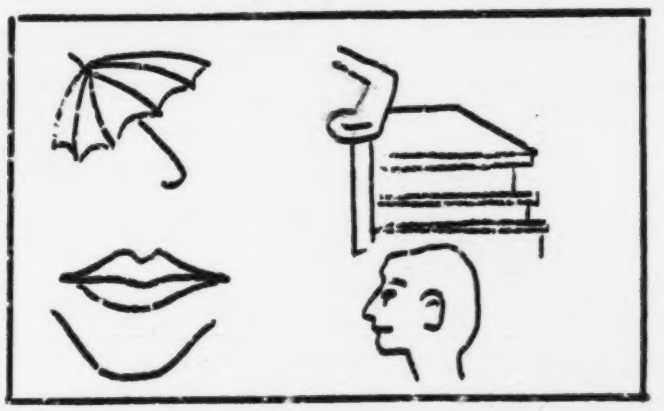

Form D Part I

Name _____ Age _____ School _____

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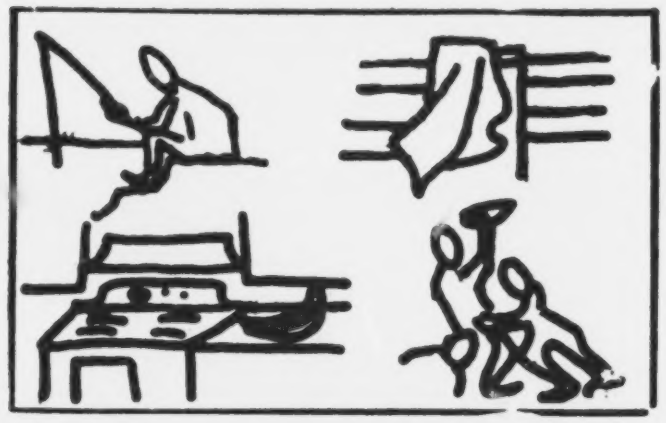

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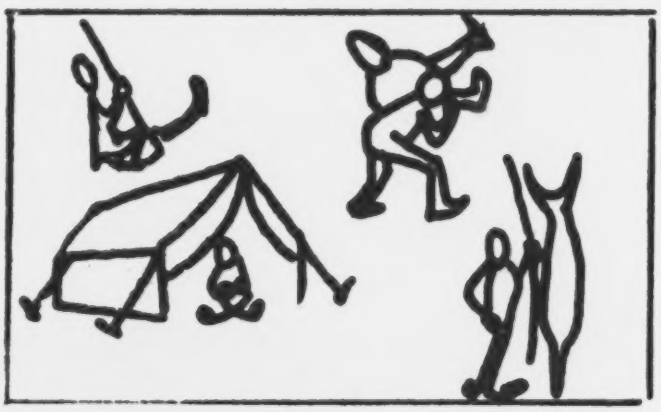

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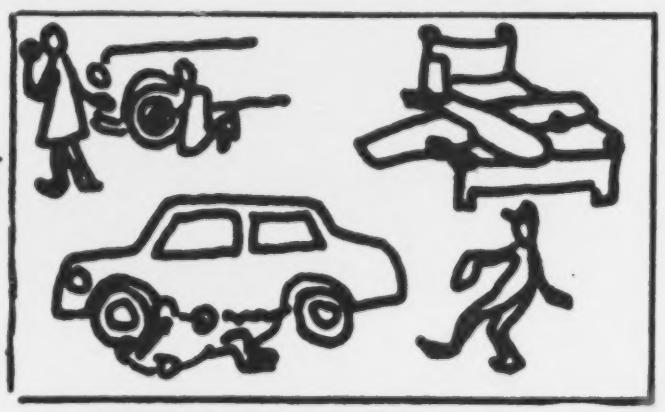

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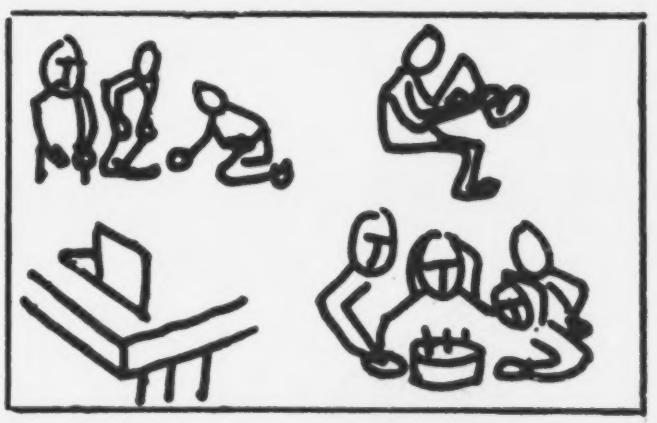

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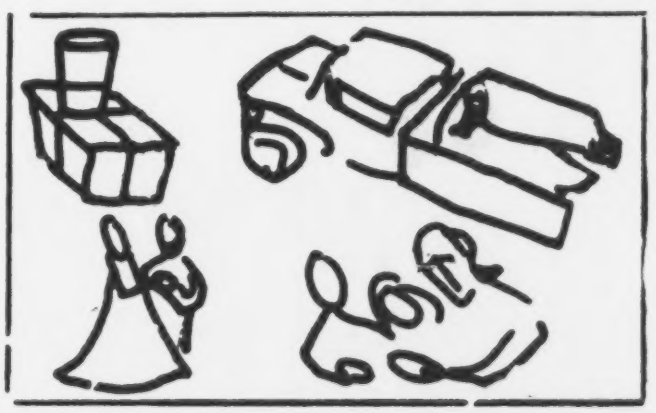

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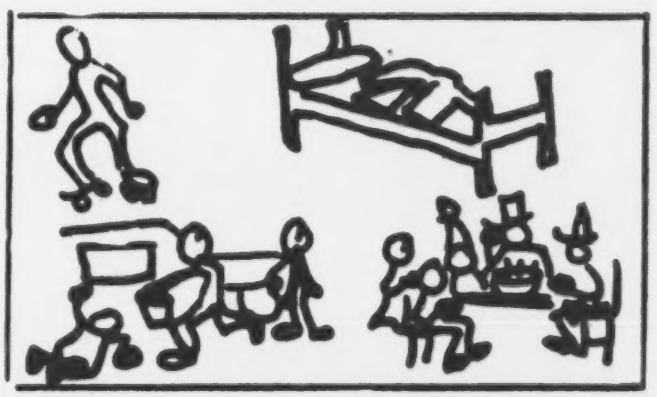

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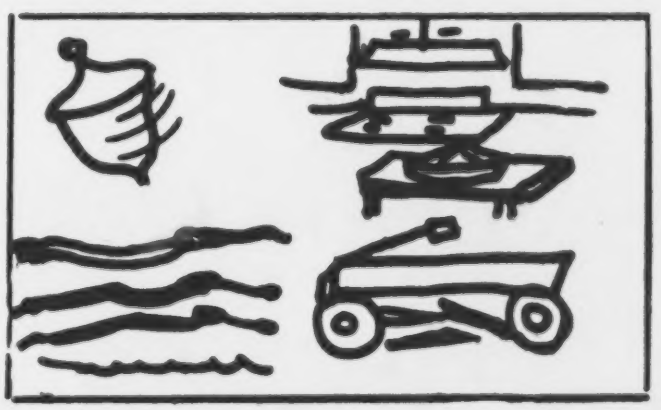

FORM "D", PART III

1. ☐ The hat was blue.
   ☐ The hat was red.
   ☐ It was green.
   ☐ The hat was brown.
   ☐ _____
   _____.

2. ☐ Three shoes were in it.
   ☐ In the suitcase there was one pair of shoes.
   ☐ There were three pairs of shoes in the suitcase.
   ☐ Six pairs of shoes.
   ☐ _____
   _____.

3. ☐ Mother put the dress in the suitcase.
   ☐ I don't know who put it in the suitcase.
   ☐ There was no dress in the suitcase.
   ☐ Mrs. Smith put the dress in the suitcase.
   ☐ _____
   _____.

4. ☐ Play clothes were in the suitcase.
   ☐ A cat was in the suitcase.
   ☐ A red hat was in the suitcase.
   ☐ Nothing was in the suitcase.
   ☐ _____
   _____.

5. ☐ Under the sink.
   ☐ The shoes were in the purse.
   ☐ In the suitcase.
   ☐ There were no shoes.
   ☐ _____
   _____.

6. ☐ Threw them away.
   ☐ Put them in the wastebasket.
   ☐ The little girl ate them.
   ☐ She put them around her neck.
   ☐ _____
   _____

7. ☐ The dress was black.
   ☐ Green and white.
   ☐ Blue and orange.
   ☐ The color of the dress was pink.
   ☐ _____
   _____.

8. ☐ The little girl.
   ☐ Mother put on the dress.
   ☐ The monkey put on the dress.
   ☐ There was no dress.
   ☐ _____
   _____.

9. ☐ The girl fell down.
   ☐ No, she didn't.
   ☐ Yes, she tripped and fell down.
   ☐ She did not fall.
   ☐ _____
   _____.

10. ☐ She dropped her purse.
    ☐ It began to rain.
    ☐ Her hat fell off.
    ☐ The little girl fell when she began to walk
    ☐ _____
    _____.

FORM "D", PART IV.

1. ☐ One rainy day they wanted to clean off their sidewalk.
   ☐ On a hot day.
   ☐ John and Billy cleaned their sidewalk after school.
   ☐ One cold, winter day.
   ☐ _____
   _____.

2. ☐ She fell down in the snow.
   ☐ No, she did not fall.
   ☐ Betty did not fall into the snow.
   ☐ Yes, she fell into the snow.
   ☐ _____
   _____.

3. ☐ The dog did.
   ☐ The boys had an idea.
   ☐ Mother had an idea.
   ☐ John did.
   ☐ _____
   _____.

4. ☐ Yes, he thought they were smart kids.
   ☐ The baker did.
   ☐ No, he didn't think they were smart.
   ☐ A cat thought they were smart.
   ☐ _____
   _____.

5. ☐ The dog had on a yellow hat.
   ☐ It was on the snowman.
   ☐ The yellow hat was on the tree.
   ☐ There was no yellow hat.
   ☐ _____
   _____.

6. ☐ The mother and father made it.
   ☐ John and Betty did.
   ☐ The snowman was made by the teachers.
   ☐ Grandmother made a snowman.
   ☐ _____
   _____.

7. ☐ In the car.
   ☐ The shovel was under the table.
   ☐ The children's shovel was broken.
   ☐ I did not see the shovel.
   ☐ _____
   _____.

8. ☐ The people.
   ☐ The children.
   ☐ The boys.
   ☐ The girls.
   ☐ _____
   _____.

9. ☐ There were two men.
   ☐ One man was shoveling snow.
   ☐ No men shoveled snow.
   ☐ Five men.
   ☐ _____
   _____.

10. ☐ It was brown.
    ☐ The snowman was red.
    ☐ The color of the snowman was white.
    ☐ It was black.
    ☐ _____
    _____.

FORM "D", PART V.

1. ☐ Close the door.
   ☐ Open a window.
   ☐ Pick up the pencil.
   ☐ Sharpen your pencil.
   ☐ _____
   _____.

2. ☐ Don't watch the clock.
   ☐ The dog ran away.
   ☐ Don't come in here.
   ☐ How much is that clock?
   ☐ _____
   _____.

3. ☐ How much is it?
   ☐ Where is it?
   ☐ Where are you going?
   ☐ Have you any money?
   ☐ _____
   _____.

4. ☐ Look at me, please.
   ☐ Look in the closet.
   ☐ She found a doll.
   ☐ She's not here today.
   ☐ _____
   _____.

5. ☐ Empty the wastebasket.
   ☐ He bought a blue kite.
   ☐ His new car is blue.
   ☐ The milk bottle is empty.
   ☐ _____
   _____.

6. ☐ May I have some more meat?
   ☐ May I go with you?
   ☐ May I have some more beans?
   ☐ May I see that please?
   ☐ _____
   _____.

7. ☐ Make some more coffee.
   ☐ The coffee pot is empty.
   ☐ Do you want coffee or tea?
   ☐ May I have some sugar for my coffee?
   ☐ _____
   _____.

8. ☐ Hit the ball.
   ☐ Step on it.
   ☐ I'm thirsty.
   ☐ I'm cold.
   ☐ _____
   _____.

9. ☐ That car has a broken window.
   ☐ There is a good movie downtown.
   ☐ Watch the cars when you cross the street.
   ☐ He rode his horse down the main street.
   ☐ _____
   _____.

10. ☐ I can't find my shoe.
    ☐ He ate six hotdogs.
    ☐ I lost my shoe.
    ☐ He climbed the tree.
    ☐ _____
    _____.

Name _____ Age _____ School _____

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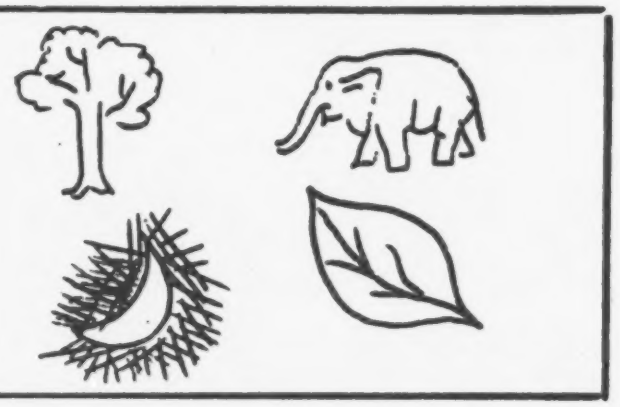

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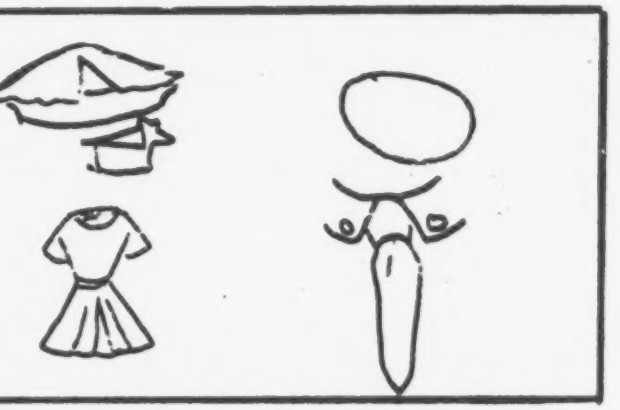

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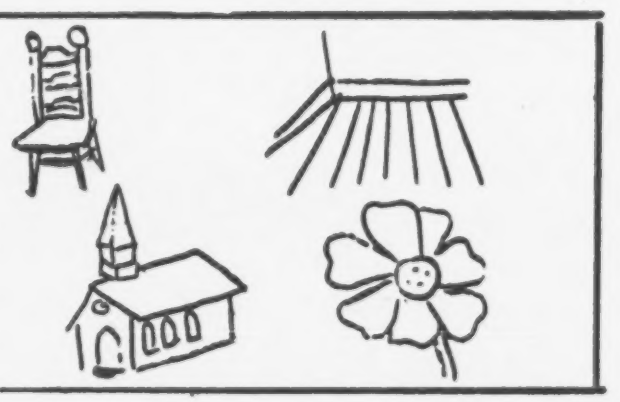

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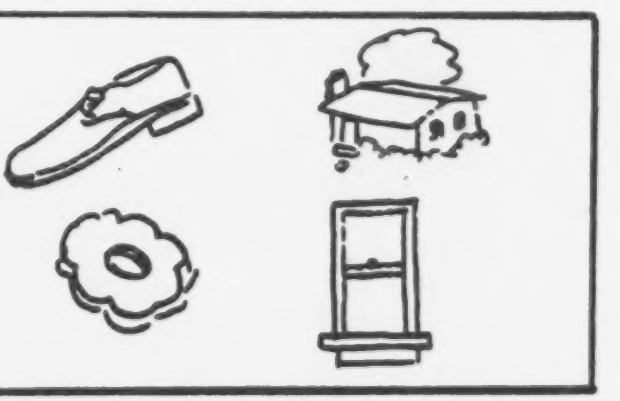

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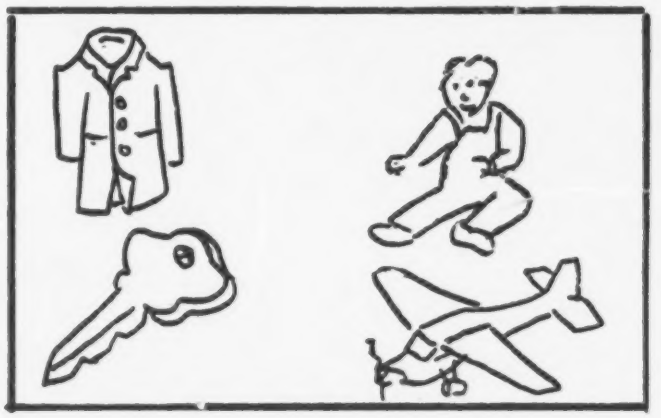

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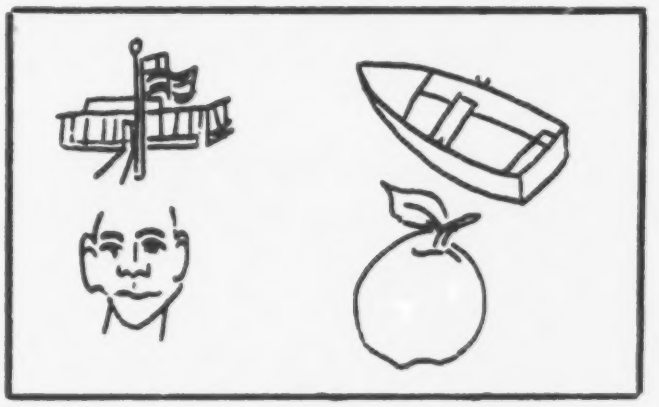

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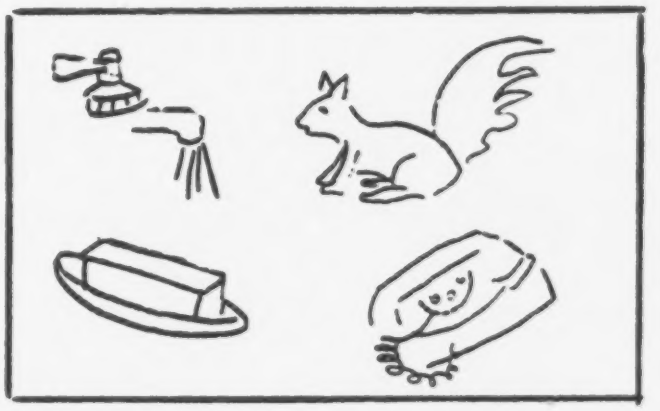

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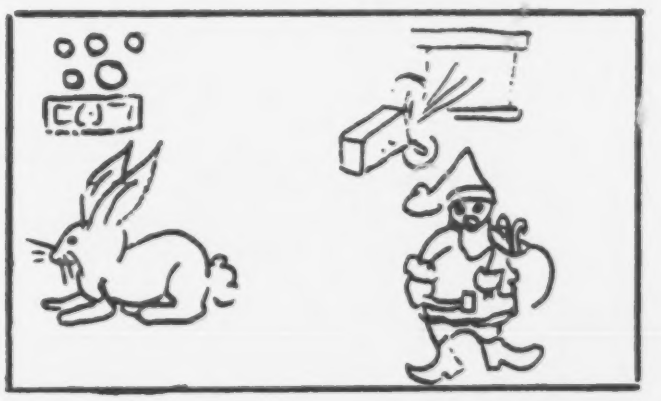

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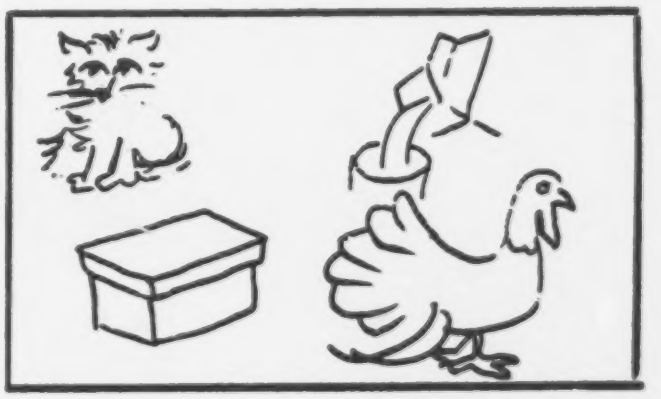

Name _____ Age _____ School _____

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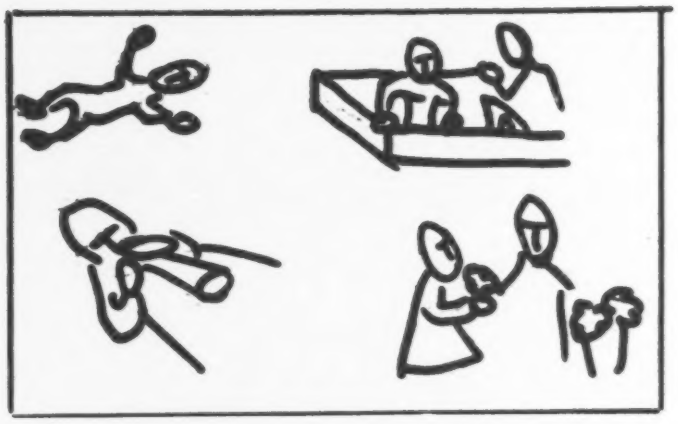

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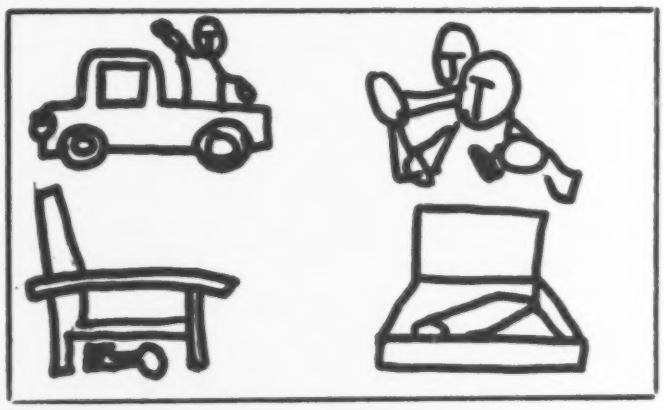

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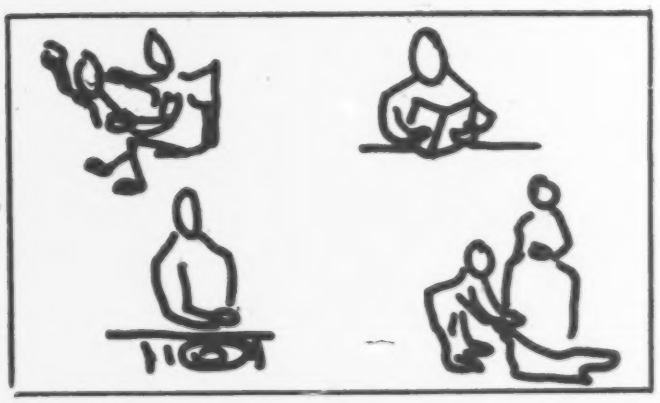

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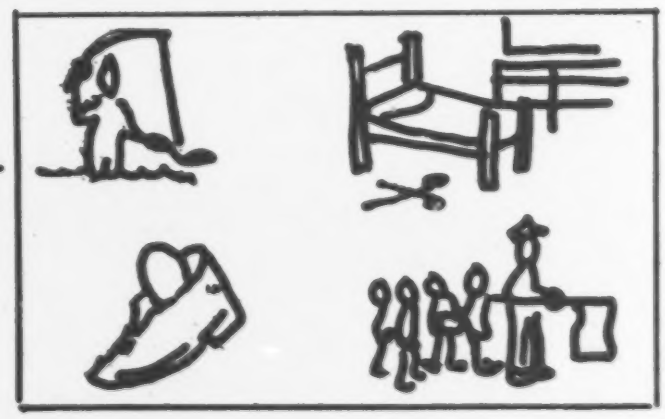

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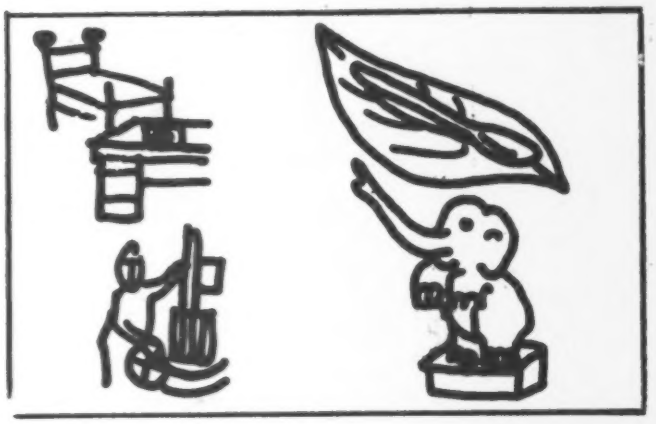

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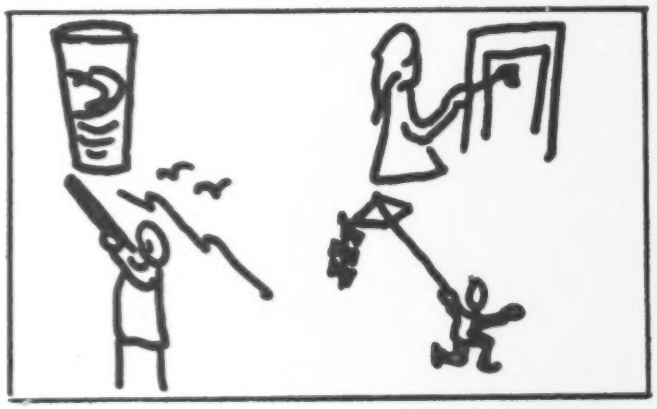

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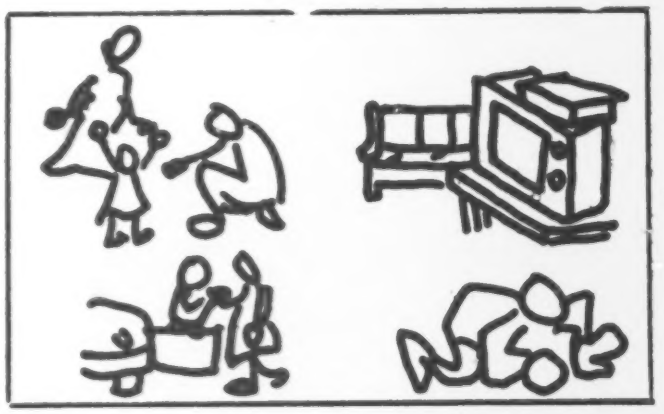

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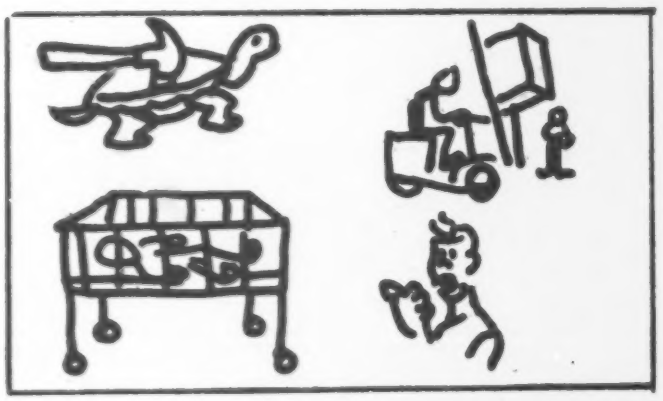

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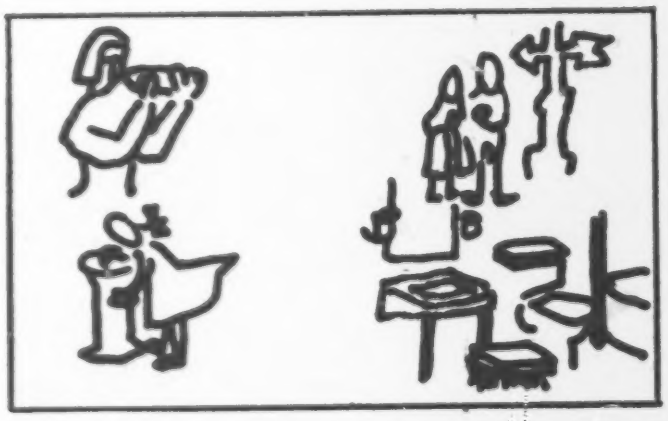

Form E Part II

FORM "E", PART III.

1. ☐ In a bag.
   ☐ The hats were in a suitcase.
   ☐ The hats were under a tree.
   ☐ In a box.
   ☐ _____
   _____.

2. ☐ A box of candy.
   ☐ There was a puppy in the blue present.
   ☐ A doll.
   ☐ In the blue present there was a cake.
   ☐ _____
   _____.

3. ☐ Black.
   ☐ The color of the doll's hair was green.
   ☐ Brown.
   ☐ The doll's hair was yellow.
   ☐ _____
   _____.

4. ☐ Seven.
   ☐ There were two hats in the box.
   ☐ Four hats were in the box.
   ☐ In the box there were nine hats.
   ☐ _____
   _____.

5. ☐ A horse.
   ☐ Her mother gave her a doll.
   ☐ She found the doll.
   ☐ There was no doll.
   ☐ _____
   _____.

6. ☐ The little girl cried.
   ☐ Dropped her comb.
   ☐ She ran home.
   ☐ When the little girl saw the presents she laughed.
   ☐ _____
   _____.

7. ☐ The doll was in the box.
   ☐ Under the lamp.
   ☐ The doll was in the purse.
   ☐ In the snow.
   ☐ _____
   _____.

8. ☐ The little girl ate the doll.
   ☐ She put the doll in her pocket.
   ☐ Put a hat on the doll.
   ☐ She did not have a doll.
   ☐ _____
   _____.

9. ☐ She put on the policeman's hat.
   ☐ Yes. She did put it on.
   ☐ The little girl did not put on a straw hat.
   ☐ I don't know.
   ☐ _____
   _____.

10. ☐ Grandmother.
    ☐ The dog opened the presents.
    ☐ The little girl.
    ☐ Mother opened the presents.
    ☐ _____
    _____.

FORM "E", PART IV.

1. ☐ At school.
   ☐ Frank bought the cookies at church.
   ☐ He bought cookies at the bakery.
   ☐ Frank bought them.
   ☐ _____
   _____.

2. ☐ He ate six cookies.
   ☐ Frank ate nine cookies.
   ☐ One cookie.
   ☐ He didn't eat any cookies.
   ☐ _____
   _____.

3. ☐ One cold day.
   ☐ His mother did not give him a cookie.
   ☐ Frank's mother gave him a cookie at breakfast.
   ☐ One summer day his mother gave him 25¢.
   ☐ _____
   _____.

4. ☐ He threw away the paper bag.
   ☐ I don't know.
   ☐ No, he did not.
   ☐ Frank threw away the paper bag.
   ☐ _____
   _____.

5. ☐ The lady in the bakery.
   ☐ A baseball player put the cookie in the bag.
   ☐ No one put the cookies in it.
   ☐ Frank's teacher did.
   ☐ _____
   _____.

6. ☐ The bag was orange.
   ☐ It was brown.
   ☐ The paper bag was black.
   ☐ There was no paper bag.
   ☐ _____
   _____.

7. ☐ The boys did.
   ☐ Grandmother baked them.
   ☐ No one bought them.
   ☐ Frank bought the cookies.
   ☐ _____
   _____.

8. ☐ Seven children.
   ☐ No one ate cookies.
   ☐ Three of them ate cookies.
   ☐ Five children ate cookies.
   ☐ _____
   _____.

9. ☐ The children played tag.
   ☐ They just sat down.
   ☐ They played baseball.
   ☐ The children played with dolls.
   ☐ _____
   _____.

10. ☐ He was going to church.
    ☐ Frank was walking to grandmother's house.
    ☐ Frank was going home.
    ☐ He was going to school.
    ☐ _____
    _____.

FORM "E", PART V.

1. ☐ Don't stop.
   ☐ Stop shoving.
   ☐ Stop that!
   ☐ Don't shove.
   ☐ _____
   _____.

2. ☐ It's almost time to start.
   ☐ The meeting will start soon.
   ☐ Can you come to the meeting?
   ☐ The meeting was last night.
   ☐ _____
   _____.

3. ☐ The boys are playing baseball.
   ☐ Try very hard to hit the baseball.
   ☐ The boys are playing football.
   ☐ The boys played a good game today.
   ☐ _____
   _____.

4. ☐ The water is too cold.
   ☐ It's cold outside.
   ☐ This is the hottest day this summer.
   ☐ The water is too hot.
   ☐ _____
   _____.

5. ☐ I read about that in a book.
   ☐ The dog bit the man.
   ☐ I read it in yesterday's paper.
   ☐ The man hit the dog.
   ☐ _____
   _____.

6. ☐ Good Evening.
   ☐ Good-bye.
   ☐ Good Morning.
   ☐ So Long.
   ☐ _____
   _____.

7. ☐ I like to exercise in the gym.
   ☐ Bowling is a good exercise.
   ☐ Do you like to bowl?
   ☐ The sun was bright.
   ☐ _____
   _____.

8. ☐ Give me a yellow pencil.
   ☐ She hurt her arm.
   ☐ I want a pencil.
   ☐ She broke her leg.
   ☐ _____
   _____.

9. ☐ How far did you go?
   ☐ What's her name?
   ☐ How did you break it?
   ☐ What kind of man is he?
   ☐ _____
   _____.

10. ☐ Don't you think it's cold in here?
    ☐ Can't you come over tonight?
    ☐ Can I have one of those apples?
    ☐ Do you think it will rain?
    ☐ _____
    _____.

Appendix C

ILLINOIS SCHOOL FOR THE DEAF
Jacksonville, Illinois
(Captioned Films for the Deaf - Project #OE6-19-074)

1. Did you obtain any new ideas in the short 1966 Summer Workshop that you were able to put into use in the classroom? _____. If so, please elaborate.

_____

_____

2. Did you find it possible to use the projectors without a teacher?_____

_____

3. Were you able to use the projectors by having one pupil monitor another pupil at the machine?

_____

4. Was maintenance of the equipment satisfactory? _____. If not, please elaborate.

_____

_____

5. In your estimation, how many projection lamps were used weekly? _____ Monthly?_____

6. Do you feel that the "Paired Associate Learning-Task", within the media, transferred to spontaneous usage by the pupil?

_____

_____

7. Were the vocabulary and language principles taught before showing the film?_____

8. Were other "loop films" available for use, or used?_____

9. Were teaching booths provided for the pupils while they were using the machines?_____

10. Were the illustrations clear?_____

11. In your opinion, do you find these materials and machines worthwhile in your classroom usage?

_____

12. Please elaborate on your use of the machines, and describe how you worked them into you program. Also, please list the problems you encountered, as well as criticisms of the machines, materials, illustrations, etc. (Use back of questionnaire, if necessary.)

_____

_____

SCHOOL:_____

TEACHER:_____

DATE:_____